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Welcome

Message from the Organizers

On behalf of the Executive Committee, the Scientific Organizing Committee and the Local Organizing Committee, welcome to the 13th European Planetary Science Congress, EPSC2018. We are delighted to be returning to Berlin, which hosted the very first EPSC in 2006.

EPSC is the largest annual international meeting on planetary science in Europe. This year, again, we are expecting a very rich and exciting programme. We have received over 1200 abstracts, the largest ever number of contributions received for a stand-alone EPSC, and these have been organized across 59 parallel oral sessions, 3 dedicated poster sessions, specific workshops and splinter meetings. We trust we have put together a very stimulating programme covering all major fields in planetary science. We hope this will foster the exchange of great science and stimulate new research ideas and collaborations. We certainly hope that this week in Berlin will be a very productive week for all participants.

EPSC2018 sees the launch of the new Europlanet Society, which will provide a sustainable structure for Europlanet to support our growing planetary science community in Europe and act as the parent organization of EPSC going forward. The Society will be open to individual and institutional members and we hope that many of you will join and play an active role in shaping the future of our community.

EPSC2018 is also an opportunity to review the activities of the €9.95 million Europlanet 2020 Research Infrastructure as it moves into the final year of the four-year project. Presentations across multiple sessions and workshops at EPSC will highlight the virtual access services and tools, the laboratory and field visits, the meetings, the training workshops and the outreach activities that have been made possible through the project, and the many people within our community that have benefited from this support through the European Commission's Horizon 2020 programme. As we look forward to developing future projects, we recognize the role that Europlanet and EPSC can play in building capacity in our community in under-represented states and in forging links with other communities, including industry, amateur astronomers, policy makers, the next generation of scientists and engineers, and planetary scientists around the world.

The EPSC social event is always a special moment in our programme and will take place on Wednesday evening (19 September), 19:30. We look forward to a cozy and convivial evening in the rustic and popular "Brauhaus Lemke am Alex". The brewery is located in the heart of Berlin directly opposite the television tower on famous Alexanderplatz. You can expect a large number of artisan brewed beer and a buffet with regional cuisine (including vegetarian and vegan options).

Berlin, Germany's capital, the 3.6 million metropolis in the heart of Europe attracts people from around the world. Berlin can look back on an eventful history, and is today a creative and dynamic city with an inimitable feeling for life. After a busy day at the EPSC2018, Berlin offers a wide range of cultural and culinary attractions as well as leisure activities. Take your pick from Europe’s largest museum complex (a UNESCO World Cultural Heritage Site), over 50 theatres, 3 opera houses and numerous museums – all within easy reach by the excellent public transport links.

Again, welcome to Berlin and to the 13th European Planetary Science Congress, EPSC2018. Enjoy your week in the beautiful and very attractive city of Berlin.

M. Cristina De Sanctis (SOC Chair)
Frank Sohl (SOC Co-chair)
Jean-Pierre Lebreton (EPSC Chair)
Nigel Mason (Europlanet Coordinator)
Athena Coustenis (Europlanet Deputy Coordinator)
Jürgen Oberst (LOC Chair)
Mario Ebel (Copernicus)
Introducing the Europlanet Society

Europlanet is launching a new Society to support planetary science in Europe.

The Society is open to individual and institutional members and anyone with an active interest in planetary science is welcome to join.

The Society will be launched at EPSC 2018 during the General Assembly at 12:45 on Thursday, 20th September.

Please come along and find out more about membership benefits and how you can join us to help shape the future of planetary science in Europe.

Are you looking for funding to kick-start an outreach project? Have you run a successful outreach project for which you deserve recognition?

The call for applications for the 2019 round of Europlanet’s Public Engagement Funding Scheme and the call for nominations for the 2019 Europlanet Prize for Public Engagement are now open: http://www.europlanet-eu.org/outreach
Location and conference address

The European Planetary Science Congress 2018 is held at the Technische Universität Berlin, Berlin, Germany from 16 to 21 September 2018. The congress is open to scientists of all nations.

Technische Universität Berlin
Main Building (H)
Straße des 17. Juni 135
10623 Berlin
Germany

Rules of conduct

- Smoking is prohibited in the entire congress centre except in the areas designated for smokers.
- It is prohibited to copy any presentation from the desktops in the lecture rooms.
- Unless the presenting author gives permission to do so, it is forbidden to take photos or videos of scientific material at the conference. Press participants reporting on research presented at the conference may take photos of material for their own personal use, provided they do not report on the research or publish any of the recorded material without the author's permission.
- Please switch off any mobile phones in the lecture rooms.
- Professional and respectful conduct of all attendees is expected. Bullying, harassment, intimidation or discrimination of any kind will not be tolerated.

Official language

The official language of the EPSC2018 is English. Simultaneous interpretation is not provided. It is therefore expected that authors are able to present their research more or less fluently in the English language.

Insurances

The organizers cannot accept liability for personal accident, loss or damage to private property, which may be incurred as a result of the participation in the European Planetary Science Congress 2018. Participants are therefore advised to arrange appropriate insurance cover. This should extend not only to travel but also to cancellation costs.

Services

Internet

Wireless internet access for EPSC2018 participants is available free of charge. Please access the network “TUB-Guest” and note that a personalised wifi code will be distributed to you at the information & registration desk (usage for the whole duration of the conference for one device). Alternatively, you may also connect to eduroam at the facilities of TU Berlin. Computers for internet use are not provided.

EPSC2018 App

The EPSC2018 mobile app is available for iPhones and Android smartphones. Please scan the QR code below or go directly to https://app.epsc2018.eu. You will be directed to the proper app version download for your particular device.

Registration & information desk

The registration & information desk is located on the ground floor (EG) of the TU Berlin.

Opening hours of registration & information desk

Sunday, 16 September 2018
15:00–18:00

Monday–Thursday, 17–20 September 2018
08:00–18:00

Friday, 21 September 2018
08:00–12:00

Press office

The press office and press conference rooms are located on the second floor of TU Berlin.

Press Officers

Anita Heward
EPSC2018 Press Officer

Livia Giacomini
EPSC2018 Press Officer

Adirana Postiglione
EPSC2018 Press Office (trainee)

Europlanet Media Centre website:
http://www.europlanet-eu.org/press/

Follow EPSC2018 on social media with the tag #EPSC2018.
Twitter account: europlanetmedia

Press office opening hours

Monday–Thursday, 17–20 September 2018
09:00–18:00

Friday, 21 September 2018
09:00–15:00
Scientific Organizing Committee
M. Cristina De Sanctis (Chair)
Frank Sohl (Co-Chair)
Jean-Pierre Lebreton (EPSC Executive Committee Chair)
Nigel Mason (Europlanet Coordinator)
Athena Coustenis (Europlanet Deputy Coordinator)
Programme Group Chairs and Coordinators:
Nicolas Altobelli
Mahesh Anand
Nicolas André
Anthony Boccaletti
Vincent Boudon
John Robert Brucato
Lina Canas
Maria Teresa Capria
Barbara Cavalazzi
Eleni T. Chatzichristou
Apostolos Christou
Athena Coustenis
Gabriele Cremonese
Marc Delcroix
Vincenzo Della Corte
Bernard Foing
Livia Giacomini
Ioulii E. Gordon
Manuel Grande
John Lee Grenfell
Ravid Helled
Ricardo Hueso
Catriona Jackman
Ralf Jaumann
Norbert Krupp
Brook Lakew
Alessandro Morbidelli
Lena Noack
Julie Necola Novakova
Gian Gabriele Ori
Olga Prieto-Ballesteros
Kim Reh
Bernard Schmitt
Jonathan Tennyson
Marcell Tessenyi
Giovanna Tinetti
Federico Tosi
Frances Westall
Olivier Witasse
Ruth Ziethe

Local Organizing Committee
Jürgen Oberst (Chair)
Daniel Wahl
Philipp Gläser
Isabel Haase
Heike Rauer
Doris Breuer
Konrad Willner
Lena Noack
Kai Wünnewann
Robert Luther
Ralf Srama
Ulrich Köhler
Mathias Burger

EPSC Executive Committee
Jean-Pierre Lebreton (EPSC Chair)
Manuel Grande (EPSC Immediate past chair)
Nigel Mason (Europlanet Chair)
Athena Coustenis (Europlanet Vice Chair & liaison officer)
Anita Heward (Media and Communications)
Marcell Tessenyi (Industry officer)
Nicolás Walter (ESP representative)
Mario Ebel (Copernicus representative)
M. Cristina De Sanctis (EPSC2018 SOC Chair)
Jürgen Oberst (EPSC LOC Chair)

Local organizing, registration, abstract & programme management
Copernicus Meetings
meetings@copernicus.org

Monday–Friday, 16–21 September 2018

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<td>Timeblock 5</td>
<td>18:15–20:00</td>
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</tbody>
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Poster display times
Poster group 1 display time
Tuesday, 18 September 2018, 08:00–20:00
Author in Attendance: Tuesday, 18:15–20:00

Authors of the first poster group are kindly requested not to put up their posters before Tuesday, 08:00 and to take down their posters by Tuesday, 20:00 at the very latest.

Poster group 2 display time
Wednesday, 19 September 2018, 08:00–20:00
Author in Attendance: Wednesday, 16:15–18:00

Authors of the second poster group are kindly requested not to put up their posters before Wednesday, 08:00 and to take down their posters by Wednesday, 20:00 at the very latest.

Poster group 3 display time
Thursday, 20 September 2018, 08:00–20:00
Author in Attendance: Thursday, 18:15–20:00

Authors of the third poster group are kindly requested not to put up their posters before Thursday, 08:00 and to take down their posters by Thursday, 20:00 at the very latest.

Fixation material will be provided for posters.
Posters are located in the Lichthof area (posters P1–P118) and the first floor area (P119–P196).
Free drinks will be served during the poster sessions.
Coffee breaks & lunch
Free coffee breaks are scheduled for Monday–Friday at 10:15–10:45 and 15:45–16:15.
Lunch is not provided. However, there are plenty of restaurants, cafés and pubs in the surrounding area of the TU Berlin.

Exhibitors

European Space Agency (ESA)
www.esa.int

Explore the Solar System with ESA’s fleet of space science satellites. The ExoMars Trace Gas Orbiter recently started analysing the martian atmosphere, while Mars Express celebrates 15 years in orbit. BepiColombo will soon be on its way to investigate mysterious Mercury, and Cheops is getting ready to characterise exoplanets. We’re also preparing to travel to the Sun with Solar Orbiter, and to the outer Solar System with our Jupiter Icy Moons Explorer. Visit our stand to meet mission scientists, pick up outreach materials, and learn more about our missions past, present and future.

European Geosciences Union (EGU)
Luisenstr. 37
80333 Munich
Germany
Phone: +49 89 21806549
info@egu.eu
www.egu.eu

The European Geosciences Union (EGU) is Europe’s premier geosciences union, dedicated to the pursuit of excellence in the Earth, planetary, and space sciences for the benefit of humanity, worldwide. The Union has about 15,000 members and organises a General Assembly that attracts over 14,000 scientists each year. The EGU publishes a number of diverse scientific journals, which use an innovative open access format, and organises a number of topical meetings, and education and outreach activities.

Community events

CE1 – EPSC Executive Committee Meeting I
(by invitation only)
Convener: Jean-Pierre Lebreton
Room: IGG Reading Room
Sunday, 16 September, 08:00–10:00

CE2 – EPN council meeting (by invitation only)
Convener: Nigel Mason
Room: Mercury
Sunday, 16 September, 10:00–17:00

CE3 – Icebreaker reception
We invite all conference participants to join us for the icebreaker reception in the Lichhof area.
Room: Lichhof
Sunday, 16 September, 16:00–18:00

CE4 – Life stories - a career in planetology
(lecture by Heike Rauer)
Conveners: Victoria K Pearson, Anita Heward, Lena Noack, Jacqueline Campbell, Loïc Rossi, Anna Losiak, Rutu Parekh
Room: Mars
Sunday, 16 September, 18:30–19:30

CE5 – Opening ceremony
Conveners: Jean-Pierre Lebreton, M. Cristina De Sanctis, Jürgen Oberst
Room: Jupiter
Monday, 17 September, 08:45–10:15

CE6 – Agency night
Conveners: Jean-Pierre Lebreton, Athena Coustenis
Room: Jupiter
Monday, 17 September, 20:15–22:00

CE7 – EPSC Executive Committee Meeting II
(by invitation only)
Convener: Jean-Pierre Lebreton
Room: IGG Reading Room
Tuesday, 18 September, 12:45–13:45

CE8 – Farinella Prize Lecture by Francis Nimmo
Convener: M. Cristina De Sanctis
Room: Jupiter
Wednesday, 19 September, 12:45–13:15

CE9 – Social event (pre-registration mandatory)
Brauhaus Lemke am Alex
Wednesday, 19 September, 19:30–22:00

CE10 – Europlanet General Assembly
Convener: Nigel Mason
Room: Jupiter
Thursday, 20 September, 12:45–13:45

Launch of the Europlanet Society
We invite you to join us for the launch of the Europlanet Society during the General Assembly at EPSC 2018 at 12:45 on Thursday, 20 September.

The Society will provide a sustainable structure for Europlanet to support our growing planetary science community in Europe and will act as the parent organisation of EPSC going forward. The new organisation will include 11 Regional Hubs to offer members a more direct and local engagement with Europlanet.

The Society is open to both individual and Institutional members and anyone with an active interest in planetary science (whether academic or industrial, professional or amateur) is welcome to join.

Please come to the General Assembly and learn more about the Europlanet Society, the membership benefits offered and how to join this exciting new venture.
| SMW1.1 – Science Flash 2018 (public) | Convener: Andrea Longobardo  
Room: Mercury  
Wednesday, 19 September, 16:15–17:45 |
| SMW1.2 – OpenPlanetary Data Café Workshop (public) | Convener: Mario D’Amore  
Room: Mercury  
Tuesday, 18 September, 12:45–15:45  
Thursday, 20 September, 12:45–15:45 |
| SMW1.3 – Seminar on Solar System Geometry with SPICE (public) | Convener: Marc Costa  
Room: Mercury  
Wednesday, 19 September, 14:00–15:45 |
| SMW1.4 – Status update of Hera, the European contribution to the first asteroid deflection mission (public) | Convener: Michael Küppers  
Room: Mercury  
Wednesday, 19 September, 12:45–13:45 |
| SMW1.5 – Solar System Virtual Observatory Hands-on session (public) | Convener: Michel Gangloff  
Room: Mercury  
Thursday, 20 September, 16:15–20:00 |
| SMW1.6 – Diversity and Inclusiveness Lunch (public) | Convener: Anita Heward  
Room: Mercury  
Friday, 21 September, 12:45–13:45 |
| SMW1.7 – NASA’s Astromaterials Data System: Engaging the Community (public) | Convener: Kerstin Lehnert  
Room: Mercury  
Tuesday, 18 September, 16:15–18:00 |
| SMW1.8 – sby – an astropy affiliated module for small-body planetary astronomy (public) | Convener: Michael Mommert  
Room: Mercury  
Tuesday, 18 September, 18:15–20:00 |
| SMW1.9 – Science Cross Talks (public) | Convener: Maike Brigitte Neuland  
Room: Mars  
Monday, 17 September, 12:45–13:45 |
| SMW1.10 – It’s all about the money (public) | Convener: Maike Brigitte Neuland  
Room: Mars  
Tuesday, 18 September, 12:45–13:45 |
| SMW1.11 – Science Cross Talks (public) | Convener: Maike Brigitte Neuland  
Room: Mars  
Wednesday, 19 September, 12:45–13:45 |
| SMW1.12 – EPSC Industry session (public) | Convener: Marcel Tessenyi  
Room: Mercury  
Monday, 17 September, 10:45–13:45 |
| SMW1.13 – USGS Integrated Photogrammetric Control Environment (IPCE) Software Demonstration (public) | Convener: Kenneth Edmundson  
Room: Mercury  
Tuesday, 18 September, 10:45–12:30 |
| SMW2.1 – Diversity Committee Meeting (by invitation only) | Convener: Anita Heward  
Room: Mercury  
Friday, 21 September, 10:45–12:30 |
| SMW2.2 – Dawn Science Team Splinter (by invitation only) | Convener: Julie Castillo  
Room: Mercury  
Thursday, 20 September, 08:30–12:30 |
| SMW2.3 – Solar System observations with ESA Euclid (by invitation only) | Convener: Colin Snodgrass  
Room: IGG Reading Room  
Thursday, 20 September, 10:45–12:30 |
| SMW2.4 – EnVision M5 (by invitation only) | Convener: Colin Wilson  
Room: IGG Reading Room  
Thursday, 20 September, 14:00–18:00 |
# EPSC2018 – session overview

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<th>Jupiter room</th>
<th>Saturn room</th>
<th>Uranus room</th>
<th>Neptune room</th>
<th>Venus room</th>
<th>Mars room</th>
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<td>OPS2</td>
<td>TPS</td>
<td>SB19/GPS12/12/FX06</td>
<td>TPL1</td>
<td>SB14</td>
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<td>Lunch</td>
<td>OPS1</td>
<td>SB4</td>
<td>OPS5</td>
<td>MD4</td>
<td>MSp1/MD9</td>
<td>LSE1/TP15</td>
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<td>Lunch</td>
<td>OPS5</td>
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<td>20:15–22:00</td>
<td>Agency night</td>
<td>OPS1</td>
<td>SB4</td>
<td>SB17/AB3</td>
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<td>OPS1</td>
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**Poster Session Group 1** (Tuesday, 18:15–20:00)
- TP1, TP2, TP5, TP6, LSE1, LSE5, LSE6, OPS2, MSp1, MSp2, MD2, MT13, MT17, AB1, SB4, SB13, SB14, SB16, SB17, SB19, OEP5, AM1

**Poster Session Group 2** (Wednesday, 16:15–18:00)
- TP4, TP8, OPS1, OPS3, OPS5, OPS6, MD3, MT15, MT16, EXO5, SB2, SB12

**Poster Session Group 3** (Thursday, 18:15–20:00)
- TP3, TP7, LSE4, OPS4, MD4, EXO1, EXO2, EXO3, SB3, SB7, SB8, SB9, SB10, SB11, OEP2, OEP6
Terrestrial Planets

TP1 Mercury Science and future exploration

Convener: Joe Zender
Co-conveners: Alice Lucchetti; Hauke Hussmann; Johannes Benkhoff; Go Murakami; Joana S. Oliveira
Lecture Room: Neptune

10:45–12:15
Chairperson: Joana Oliveira

Laboratory measurement, ground-based observations and simulation

10:45–11:00: EPSC2018-733
Mid-Infrared Spectroscopy of Planetary Analogues: A Database for Planetary Remote Sensing
Mokr Andreas, Klemme Stephan, Weber Iris, Sohn Martin, Stojic Aleksandra, Hiesinger Harald, Helbert Joern

11:00–11:15: EPSC2018-763
Bi-directional reflectance and NanoFTIR spectroscopy of synthetic analogues of Mercury: Supporting MERTIS payload of ESA/JAXA BepiColombo mission
Varatharajan Indhu, Maturilli Alessandro, Helbert Jörn, Ulrich Georg, Born Kirsten, Namur Olivier, Kästner Bernd, Hecht Lutz, Charlier Bernard, Hiesinger Harald

11:15–11:30: EPSC2018-1216
Ground-Based BepiColombo Support with the Rapid Imaging Planetary Spectrograph
Schmidt Carl, Baumgardner Jeffrey, Moore Luke, Bida Tom

11:30–11:45: EPSC2018-649
Simulation of Space-Weathered TIR Spectra on Mercury
Wohlfarth Kay, Grumpe Anne, Wöhler Christian, Stojic Aleksandra, Molok Andreas, Hiesinger Harald

Magnetic Field

11:45–12:00: EPSC2018-650
Concerning the Offset Dipole Magnetic Field of Planet Mercury
Heyner Daniel

12:00–12:15: EPSC2018-1081
MHD instabilities at the Mercury’s magnetopause
Ivanovski Stavro, Miililo Anna, Kartalev Monio, Massetti Stefano

12:15 Lunch break

14:00–15:30
Chairperson: Alice Lucchetti

Surface

14:00–14:15: EPSC2018-163
Hollows and their relationship with geochemical terrains
Lucchetti Alice, Pajola Maurizio, Merusi Marco, Cremonese Gabriele, Galluzzi Valentina, Giacomini Lorenza, Carli Cristian, Marzo Giuseppe A., Ferrari Sabrina, Massironi Matteo, PalumboPasquale

14:15–14:30: EPSC2018-164
Spectral clustering on Hermean hollows located on pyroclastic deposits
Pajola Maurizio, Lucchetti Alice, Marzo Giuseppe, Cremonese Gabriele, Massironi Matteo

14:30–14:45: EPSC2018-522
Mapping Low-Reflectance Material on Mercury
Klima Rachel, Biewelt David, Denevi Brett, Ernst Carolyn, Murchie Scott, Peplowski Patrick

14:45–15:00: EPSC2018-653
MESSENGER Epithermal Neutron Map of Mercury: Possible Low-Latitude Hydrogen Variation
Wilson Jack, Lawrence David, Peplowski Patrick

15:00–15:15: EPSC2018-850
Spectral and lithological heterogeneities in the Shakespeare (H-03) quadrangle of Mercury
Bott Nicolas, Doressoundiram Alain, Perna Davide, Zambon Francesca, Carli Cristian, Capaccioli Fabrizio

15:15–15:30: EPSC2018-1001
Potential Identification of Sublimation-Driven Downslope Mass Movements on Mercury
Malliband Christopher C., Conway Susan J., Rothery David A., Balme Matthew R.

15:30 Coffee break

16:15–18:00
Chairperson: Hauke Hussmann

Geodesy and Interior

16:15–16:30: EPSC2018-511
Constraining the Early History of Mercury and its Core Dynamo by Studying the Crustal Magnetic Field
Oliveira Joana S., Hood Lon L.

16:30–16:45: EPSC2018-610
Viscoelastic Tides of Mercury and Implications for its Inner Core Size
Steinbrügge Gregor, Padovan Sebastiano, Hussmann Hauke, Steinke Teresa, Stark Alexander, Oberst Jürgen

16:45–17:00: EPSC2018-890
Mercury’s rotational state from self-registration of Mercury Laser Altimeter profiles
Stark Alexander, Oberst Jürgen, Hussmann Hauke, Steinbrügge Gregor

17:00–17:15: EPSC2018-404
Characterizing the deviations of Mercury’s bulk composition from solar abundances
Brugger Bastien, Mousis Olivier, Deleuil Magali, Ronnet Thomas

BepiColombo: Outreach, Mission, and Instruments

17:15–17:30: EPSC2018-420
BepiColombo - The next step of Mercury Exploration with two orbiting spacecraft
Zender Joe, Benkhoff Johannes, Murakami Go

European Planetary Science Congress 2018
17:30–17:45: EPSC2018-219
Preparing for the epic adventures of BepiColombo
Baldwin Emily, Mignone Claudia, Bauer Markus

17:45–18:00: EPSC2018-1276
BepiVR: Virtual Reality for BepiColombo outreach
Politi Romolo

18:00 Break

18:15–19:45 Chairperson: Go Murakami

18:15–18:30: EPSC2018-1114
Exploration of the innermost planet Mercury’s environment by BepiColombo
Murakami Go, Hayakawa Hajime, Fujimoto Masaki

18:30–18:45: EPSC2018-932
The scientific outcome from BepiColombo flybys at Venus
Mangano Valeria, de la Fuente Sara, Montagnon Elsa, Casale Mauro, Benkhoff Johannes, Zender Joe, Murakami Go, Orsini Stefano, De Angelis Elisabetta, Rispoli Rosanna

18:45–19:00: EPSC2018-973
Simulation of MPO orbit reconstruction using Doppler observations and comparison with laser altimetry observations
Hosseinifarani Alireza, Bertone Stefano, Arnold Daniel, Jäggi Adrian, Thomas Nicolas

19:00–19:15: EPSC2018-870
Investigating X-ray fluorescence from the surface of Mercury using MIXS
Cooper Rose, Grande Manuel, Bunce Emma, Martindale Adrian

19:15–19:30: EPSC2018-1184
The ISA accelerometer, in view of BepiColombo launch
Iafolla Valerio, Fiorenza Emiliano, Lefevre Carlo, Lucchesi David Massimo, Lucente Marco, Magnafico Carmelo, Peron Robert, Santoli Francesco

19:30–19:45: EPSC2018-386
Scientific Performance of the BepiColombo Laser Altimeter (BELA) at Mercury
Hussmann Hauke, Steinbrügge Gregor, Stark Alexander, Oberst Jürgen, Thomas Nicolas, Lara Luisa

END OF ORAL PROGRAMME TP1

TP2 Mars Interior and Surface

Convener: Ernst Hauber
Co-conveners: Gino Erkeling; Solmaz Adeli; Ana-Catalina Plesa
Lecture Room: Uranus

14:00–15:45 Chairperson: Ernst Hauber

Martian Polar Caps and Cryosphere

14:00–14:15: EPSC2018-429
Depth, volume and density of Mars’ seasonal polar caps
Smith David E, Zuber Maria T

14:15–14:30: EPSC2018-225
Stereo-topographic mapping of the stratigraphy of Mars’ South Polar Layered Deposits
Becerra Patricio, Sori Michael, Thomas Nicholas, Pommerol Antoine, Almeida Miguel, Tulyakov Stepan, Ivanov Anton, Simioni Emmanuelle, Cremonese Gabriele and the CaSSIS Team

14:30–14:45: EPSC2018-1273
Erosion rate of the north polar scarps of Mars based on automated detection of block falls in HiRISE images
Fanara Lida, Gwinner Klaus, Hauber Ernst, Oberst Jürgen

14:45–15:00: EPSC2018-1019
An Investigation of Araneiform Terrain in Angustus Labyrinthus, Mars.
Hao Jingyan, Michael Gregory, Adeli Solmaz, Jaumann Ralf

15:00–15:15: EPSC2018-1025
Hyperspectral characterisation of the Martian south polar residual cap using CRISM
Campbell Jacqueline, Sidiropoulos Panagiotis, Muller Jan-Peter

15:15–15:30: EPSC2018-149
The Penetration of Solar Radiation into Carbon Dioxide Ice and Snow
Chinnery Hannah, Hagermann Axel, Kaufmann Erika, Lewis Stephen

15:30–15:45: EPSC2018-805
Experimental, spectral and colour analysis of H2O and CO2 ices and dust samples. Application to Martian, icy surfaces.
Yoldi Zurine, Pommerol Antoine, Thomas Nicolas

15:45 Coffee break

16:15–18:00 Chairperson: Ina Plesa

Icy and Aqueous Processes

16:15–16:30: EPSC2018-346
Geomorphological Evidence of Local Presence of Ice-Rich Deposits in Terra Cimmeria, Mars
Adeli Solmaz, Hauber Ernst, Michael Gregory G., Fawdon Peter, Smith Isaac B., Jaumann Ralf

16:30–16:45: EPSC2018-703
Hydrological History of a Complex Lake and Valley System in Western Arabia Terra, Mars
Dickeson Zachary, Grindrod Peter, Balmse Matt, Davis Joel

16:45–17:00: EPSC2018-365
Aqueous Alteration at Libya Montes Reveals Changing Geochemical Environments on Early Mars
Tirsch Daniela, Bishop Janice L., Voigt Joana R. C., Tornabene Livio L., Erkeling Gino, Jaumann Ralf

17:00–17:15: EPSC2018-682
An Investigation of Hydrated Minerals in Jezero Crater
Rangarajan Vidhya Ganesh, Bharti Rishikesh, Dutta Subhashisa
17:15–17:30: EPSC2018-781
Hydrothermal alteration in association with large impact basins on Mars
**Viviano Christina**, Phillips Michael

17:30–17:45: EPSC2018-68
The Banded Terrain on the Hellas Basin Floor, Mars: Gravity-driven flow not Supported by New Observations
**Bernhardt Hannes**, Ivanov Mikhail, Reiss Dennis, Hiesinger Harald, Hauber Ernst, Clark Jaclyn D.

17:45–18:00: EPSC2018-101
Terrestrial Saharan analogues to examine the groundwater origin of theater-headed valleys on Mars
**Abotalib Abotalib**, Heggy Essam

18:00 Break

18:15–20:00
Chairperson: Solmaz Adeli

**Surface Processes**

18:15–18:30: EPSC2018-260
Overview of recent ChemCam Findings after 2000 sols at Gale Crater, Mars
**Schröder Susanne**, Wiens Roger C., Gasnault Olivier, Mangold Nicolas, Johnson Jeffrey R., L’Haridon Jonas, Frydenvang Jens, Meslin Pierre-Yves, Cousin Agnes, Maurice Sylvestre

18:30–18:45: EPSC2018-252
Experimental investigation of sand transport mechanisms by boiling liquid water under Mars-like conditions and potential implications for maritan gullies and RSL
**Herny Clémence**, Raack Jan, Conway Susan, Carpy Sabrina, Coulleu-Banse Tanguy, Patel Manish

18:45–19:00: EPSC2018-457
Active Gullies and Mass Wasting on Equatorial Mars
**McEwen Alfred S.**, Thomas Melissa, Dundas Colin

19:00–19:15: EPSC2018-1237
Sediment transport by boiling seeping water: exploring effects of grainsize and atmospheric conditions
**Conway Susan**, Carpy Sabrina, Masse Marion, Perrin Zoe, Enguehard Pauline, Patel Manish

19:15–19:30: EPSC2018-448
Recent rockfalls on Mars
**Tesson Pierre-Antoine**, Conway Susan, Mangold Nicolas, Lewis Stephen, Ciążka Jakub

19:30–19:45: EPSC2018-339
Lobate features on Mars: a morphological and comparative study with dry and wet terrestrial analogues
**Gastineau Renaldo**, Conway Susan, Johnsson Andreas, Mangold Nicolas, Grindrod Peter

19:45–20:00: EPSC2018-192
Preferred orientations of Martian rock cracks through radiative transfer and geometric analyses
**Smith Christina**, Moores John

END OF ORAL PROGRAMME TP2

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**TP5 Atmospheres of terrestrial planets**

Convener: Anni Määttänen
Co-convener: Olivier Witasze; Francisco González-Galindo; Dmitrij Titov
Lecture Room: Saturn

10:45–12:25

**Venus**

10:45–11:05: EPSC2018-1179
Discussion about the Physical Origin of the Venus Low Atmosphere Chemical Gradient
**Cordier Daniel**, Lebonnois Sébastien, Bonhommeau David

11:05–11:20: EPSC2018-950
Venus near surface temperature
**Mueller Nils**, Tsang Con, Lebonnois Sebastien, Smrekar Suzanne

11:20–11:35: EPSC2018-275
Venus’ winds measured with visible imaging-spectroscopy at the THEMIS observatory
**Gaulme Patrick**, Schneider François Xavier, Widemann Thomas, Gonçalves Ivan, Lopez Ariste Arturo, Gelly Bernard

11:35–11:50: EPSC2018-379
Akatsuki and TNG/HARPS-N coordinated wind measurements of cloud top Venus’ atmosphere

11:50–12:10: EPSC2018-810
Venus’ Meridional wind flow from: Akatsuki/UVI, Venus Express/VIRTIS, TNG/HARPS-N and CFHT/ESPaDOnS
**Machado Pedro**, Widemann Thomas, Peralta Javier, Gonçalves Ruben, Takagi Masahiro, Harutyunyan Avet, Lee Yeon Joo, Watanabe Shigeto, Satoh Takehiko, Oghara Kazunori

Ensemble Forecast Sensitivity to Observations (EFSO) of the Venus data assimilation system
**Sugimoto Norihiko**, Yamazaki Akira, Kouyama Toru, Kashimura Hiroki, Enomoto Takeshi, Takagi Masahiro

12:25 Lunch break
### Early Mars

14:00–15:45

**Early Mars**

14:00–14:15: EPSC2018-157
Simulation of the coupled atmosphere and hydrosphere on early Mars using a GCM
*Kuroda Takeshi*, Kamada Arihiro, Toriumi Katsushige, Kasaba Yasumasa, Terada Naoki, Nakagawa Hiromu

14:15–14:35: EPSC2018-694
Atmospheric escape at early Mars and its constraints on the evolution of the Martian atmosphere
*Scherg Manuel*, Dyadechkin Sergey, Amerstorfer Ute, Lammer Helmut, Khodachenko Maxim, Lichtenegger Herbert, Kallio Esa, Alho Markku, Alexeev Igor, Parunakian David, Adam Raven, Belenkaya Elena, Groeller Hannes, Johnstone Colin, Guedel Manuel

### Mars upper atmosphere and escape

14:35–14:50: EPSC2018-734
Study of the deuterium Lyman-alpha emission observed with the “low resolution mode” of MAVEN/IUVS
*Chaufray Jean-Yves*, Mayyasi Majd, Chaffin Mike, Clarke John, Deighan Justin, Jain Sonal, Bhattacharyya Dolon, Schneider Nick, Jakosky Bruce

14:50–15:10: EPSC2018-166
D and H in the Upper Atmosphere of Mars
*Mayyasi Majd*, Clarke John, Bhattacharyya Dolon

15:10–15:30: EPSC2018-64
Water in the martian thermosphere and its effect on hydrogen escape
*Krasnopolsky Vladimir*

15:30–15:45: EPSC2018-636
Atomic oxygen in the Martian thermosphere traced by the 130.4 and 135.6 nm emission lines with MAVEN/IUVS
*Ritter Birgit*, Gérard Jean-Claude, Gkouvelis Leonardos, Hubert Benoit, Jain Sonal, Schneider Nick

15:45 Coffee break

16:15–18:00

16:15–16:30: EPSC2018-334
CO₂ variations in the Martian lower thermosphere from IUVS-MAVEN airglow observations
*Gkouvelis Leo*, Gerard Jean Claude, Ritter Birgit, Hubert Benoit, Jain Sonal, Schneider Nick

16:30–16:45: EPSC2018-496
Temperature variability in the Martian thermosphere
*González-Galindo Francisco*, López-Valverde Miguel Ángel, García-Comas Maya, Forget François, Millour Éhouarn

16:45–17:00: EPSC2018-186
Global characteristics of gravity waves in the upper atmosphere of Mars as measured by MAVEN/NGIMS
*Siddle Alex*, Mueller-Wodarg Ingo, Yelle Roger, Stone Shane

### Mars middle and lower atmosphere - modelling

17:00–17:15: EPSC2018-477
Impact of gravity waves on the middle atmosphere of Mars studied combining Global Climate modelling and Mars Climate Sounder observations
*Gilli Gabriella*, Forget François, Spiga Aymeric, Navarro Thomas, Montabone Luca

17:15–17:30: EPSC2018-680
Gravity wave drag parameterization for the new generation of Mars Global Circulation Models
*Kling Alexandre*, Kahre Melinda, Wilson John, Brecht Amanda, Murphy James

17:30–17:45: EPSC2018-127
Flow associated with the Condensation and Sublimation of Carbon Dioxide Ice on Mars
*Chow Keith K. C.*

17:45–18:00: EPSC2018-1121
Dynamical Processes of Dust Lifting in the northern Mid-latitude region of Mars during the Storm Season
*Xiao Jing*

18:00 Break

18:15–19:30

18:15–18:30: EPSC2018-596
Tagging dust and water in the NASA Ames Mars GCM: a new global vision of the Martian climate
*Bertrand Tanguy*, Kahre Melinda, Wilson John, Kling Alexandre

18:30–18:45: EPSC2018-847
Impact of the refinement of the vertical resolution on the simulation of the water cycle by the martian LMD Global Climate Model
*Vals Margaux*, Forget François, Spiga Aymeric, Millour Éhouarn

18:45–19:00: EPSC2018-460
Simulation of CO and H₂O₂ on Mars
*Daerden Frank*, Neary Lori, Viscardy Sébastien, García Muñoz Antonio, Clancy R. Todd, Smith Michael D., Encrenaz Thérèse

19:00–19:15: EPSC2018-480
Simulation of Ozone and Oxygen Airglow on Mars
*Neary Lori*, Daerden Frank, Viscardy Sebastien, Garcia-Munoz Antonio, Clancy R. Todd, Smith Michael D., Fedorova Anna

19:15–19:30: EPSC2018-689
Looking for the sources of methane on Mars: statistical analysis of GCM simulations
*Viscardy Sébastien*, Daerden Frank, Neary Lori, Giuranna Marco, Etiope Giuseppe, Oehler Dorothy

### END OF MONDAY ORAL PROGRAMME TP5

**ORAL PROGRAMME TP5 CONTINUES ON TUESDAY**
Outer Planet Systems

OPS2 Cassini’s Legacy: One Year Later

Convener: Scott Edgington
Co-conveners: Sushil K. Atreya; Athena Coustenis; Norbert Krupp; Linda Spilker
Lecture Room: Jupiter

10:45–12:30
Chairpersons: L. Spilker and S. Edgington

10:45–11:15: EPSC2018-168
Cassini: One Year Later
Spilker Linda, Edgington Scott

11:15–11:30: EPSC2018-111
Saturn’s deep atmosphere revealed by the Cassini Grand Finale gravity measurements
Galanti Eli, Kaspi Yohai, Miguel Yamila, Guillot Tristan, Durante Daniele, Racioppa Paolo, less Luciano

11:30–11:45: EPSC2018-984
A clue about Saturn’s normal modes from analysis of Cassini’s Grand Finale gravity orbits
Durante Daniele, Racioppa Paolo, less Luciano

11:45–12:00: EPSC2018-527
On the Characteristics of Charged Dust in Saturn’s Equatorial Ionosphere - Implications from Cassini RPWS/LP data

12:00–12:15: EPSC2018-1088
Ring- and Moon-Associated Energetic Particle dropouts observed by MIMI-LEMMS during Cassini’s Ring-Grazing Orbits
Jones Geraint, Roussos Elias, Kollmann Peter, Krupp Norbert, Mitchell Donald

12:15–12:30: EPSC2018-295
Saturn’s Equatorial Ionosphere as Observed by Cassini: Composition and Flow

12:30 Lunch break

14:00–14:45: EPSC2018-120
On the carbon isotope ratio in Titan’s atmosphere and interior
Krasnopolsky Vladimir

14:45–15:00: EPSC2018-1203
Titan’s interior structure after Cassini/Huygens
Sotin Christophe, Rambaux Nicolas, Cadec Ondrej, Kalousova Klara, Neri Adrien, Reynard Bruno

15:00–15:15: EPSC2018-411
Can the Alkanofener of Titan show a chemical stratification?
Cordier Daniel, Coutelier Maëlie

15:15–15:30: EPSC2018-519
The geological history of Saturn’s icy moons and their interaction with the rings as revealed by the Cassini Radar
Le Gall Alice, West Richard, Bonnemoy Lea, Leyrat Cedric, Janssen Michael, Lefouch Emmanuelle, Sultana Robin

15:30–15:45: EPSC2018-103
Cassini Observations of Saturn’s Irregular Moons
Denk Tilmann, Motolla Stefano

END OF ORAL PROGRAMME OPS2

OPS3 Ocean worlds and Icy Moons

Convener: Alex Hayes
Co-conveners: Jean-Pierre Lebreton; Olivier Witasse; Athena Coustenis; Elizabeth Turtle; Federico Tosi
Lecture Room: Jupiter

16:15–18:00
Chairperson: Athena Coustenis

16:15–16:30: EPSC2018-622
Enceladus’ interior, tectonics, and evolution from tidal analysis (solicited talk)
Rhoden Alyssa, Hurford Terry, Henning Wade, Spitalte Joseph, Huff Eric

16:30–16:45: EPSC2018-842
Long-term stability of Enceladus’ ice shell
Cadec Ondrej, Soucek Ondrej, Behounkova Marie, Choblet Gael, Tobie Gabriel

16:45–17:00: EPSC2018-464
Viscous tidal dissipation in Enceladus’s ocean
Rekier Jeremy, Trinh Antony, Triana Santiago, Dehant Veronique

17:00–17:15: EPSC2018-57
Observing the Potential for a Diversity of Metabolic Pathways in the Ocean of Enceladus
Waite J. Hunter, Ray Christine, Glein Chris, Kempf Sascha, Postberg Frank, Lunine Jonathan

17:15–17:30: EPSC2018-1252
Macromolecular organic compounds emerging from the Enceladus ocean
Postberg Frank, Khawaja Nozair, Klein Christopher R., Hsu Hsiang-Wen, Kempf Sascha, Klenner Fabian, Nölle Lenz, Schmidt Juergen, Tobie Gabriel, Waite J. Hunter
17:30–17:45: EPSC2018-655
Rhea’s thermal properties and regional anomalies revealed by Cassini’s Radar/radiometer
Bonnefoy Lea, Le Gall Alice, Lellouche Emmanuel, Leyrat Cédric, Janssen Michael A.

17:45–18:00: Short Poster Presentation

18:00 Break

18:15–20:00
Chairperson: Federico Tosi

18:15–18:30: EPSC2018-894
Core-ocean-ice exchange processes in Europa, Ganymede and Callisto (solicited talk)
Tobie Gabriel, Harel Ludovine, Kalousova Klara, Kvorka Jakub, Behounkova Marie, Bollengier Olivier, Brown J. Michael, Cadek Ondrej, Choblet Gaël, Dumoulin Caroline, Grasset Olivier, Journaux Baptiste, Postberg Frank, Solin Christophe, Soucek Ondrej, Vance Steve

18:30–18:45: EPSC2018-246
Layer formation in Europa’s subsurface ocean by double-diffusive convection
Wong Teresa, Hansen Ulrich, Wieheofer Thomas, McKinnon William

18:45–19:00: EPSC2018-539
Exploring Europa’s Habitability: The Europa Clipper on the Path to Critical Design
Korth Haje, Pappalardo Robert, Senske David, Klima Rachel, Richey Christina, Craft Kate

19:00–19:15: EPSC2018-203
Observational constraints on the distribution and temperature dependence of H$_2$O$_2$ on the surface of Europa
Trumbo Samantha, Brown Michael, Hand Kevin, de Kleer Katherine

19:15–19:30: EPSC2018-470
Heat and water generation in the vicinity of Europa’s strike-slip faults
Sládková Kateřina, Soucek Ondrej, Kalousová Klára

19:30–19:45: EPSC2018-443
JUICE: A European mission to explore the emergence of habitable worlds around gas giants
Witasse Olivier and the JUICE Science Working Team and the JUICE Project Team

19:45–20:00: EPSC2018-630
Structural map of the grooves of Ganymede
Rossi Costanza, Cianfarra Paola, Salvini Francesco, Bourgeois Olivier

END OF MONDAY ORAL PROGRAMME OPS3
ORAL PROGRAMME OPS3 CONTINUES ON TUESDAY

Missions, Techniques and Industry

MTI3 Advances in Planetary Mapping, Geographic Information Techniques, and Data Mining

Convener: Anthony Cook
Co-convener: Konrad Willner
Lecture Room: Mars

18:15–20:00
Chairperson: Anthony Cook

18:15–18:30: EPSC2018-50
SPICE for ESA Planetary Missions: geometry and visualization support to studies, operations and data analysis
Costa Marc

18:30–18:45: EPSC2018-53
SPICE-based Python packages for Solar System Exploration geometry exploitation
Costa Marc, Grass Markus

18:45–19:00: EPSC2018-80
An Integrated Software Environment to Improve the Photogrammetric Control Process for Planetary Mapping
Edmundson Kenneth, Archinal Brent, Backer Jeannie, Becker Tammy, Berry Kristin, Combs Christopher, Cook Debbie, Goes Adam, Humphrey Ian, Mapel Jesse, Neubauer Cole, Paquette Adam, Shepherd Makayla, Sides Stuart, Smith Ethan, Stapleton Summer, Sucharski Tracie, Weller Lynn, Wilson Tyler

19:00–19:15: EPSC2018-432
A summary report on 3D imaging software, data and their distribution from the EU FP-7 iMars project
Muller Jan-Peter, Tao Yu, Sidiropoulos Panagiotis

19:15–19:30: EPSC2018-509
Automated feature detection and tracking of RSLs at Valles Marineris through super-resolution restoration and deep learning using HiRISE images and 3D terrain models
Tao Yu, Muller Jan-Peter

19:30–19:45: EPSC2018-367
Crater size-frequency distribution measurements with CSFD Tools
Riedel Christian, Michael Gregory, Kneissl Thomas, Orgel Csilla, Hiesinger Harald, van der Bogt Carolyn H.

19:45–20:00: EPSC2018-442
Geodata workflow for the AMADEE-18 Mars analog mission
Sejkora Nina, Sams Sebastian, Groemer Gernot

END OF ORAL PROGRAMME MTI3
MTI7 Planetary in situ measurements

Convener: Axel Hagermann
Co-conveners: Günter Kargl; Erika Kaufmann
Lecture Room: Mars

16:15–18:00
Chairperson: Hagermann

16:15–16:30: EPSC2018-525 (withdrawn)
Dust Cleaning of Solar Arrays on Mars by High Velocity Flushing of Pressurized CO2 Obtained from a Simple Thermal Freezing-Sublimation Process
Arias Francisco J

16:30–16:45: EPSC2018-531
The Jovian Dynamics and Composition Analyzer on JUICE
Wittmann Philipp, Wieser Martin, Barabash Stas

The CheMin X-ray Diffractometer: Results from Mars and Prospects for Next Generation XRD Instruments
Blake David, Sarrazin Philippe, Bristow Thomas

17:00–17:15: EPSC2018-789
A miniaturized Raman/LIBS instrument for in-situ investigation of celestial bodies in pioneering missions
Kubitza Simon, Vogt David S., Rammelkamp Kristin, Böttger Ute, Frohmann Sven, Hansen Peder B., Schröder Susanne, Hübers Heinz-Wilhelm

17:15–17:30: EPSC2018-749
LIBS and Raman Data Fusion for in-situ Planetary Exploration
Rammelkamp Kristin, Schröder Susanne, Kubitza Simon, Vogt David Sebastian, Frohmann Sven, Hansen Peder Bagge, Böttger Ute, Hanke Franziska, Hübers Heinz-Wilhelm

17:30–17:45: EPSC2018-754
Time-resolved spectral imaging of LIBS plasma at low pressures for the exploration of Solar System bodies
Vogt David, Frohmann Sven, Kubitza Simon, Hansen Peder, Rammelkamp Kristin, Schröder Susanne, Hübers Heinz-Wilhelm

17:45–18:00: EPSC2018-1172
Lithospace: an automated system for in situ petrographic thin section preparation on Mars
Foucher Frédéric and the Lithospace team

END OF ORAL PROGRAMME MTI7

Small Bodies (comets, KBOs, rings, asteroids, meteorites, dust)

SB13/MTI8 Sample return missions: lessons learned and future perspectives (co-organized)

Convener: Andrea Longobardo
Co-conveners: Fabrizio Dirri; Maurizio Pajola; Sarah-Jane Gill
Lecture Room: Mars

10:45–12:30
Chairpersons: Andrea Longobardo and Maurizio Pajola

10:45–11:05: EPSC2018-668
Chang’E-5 returns to (and from) the Moon: Geological characterization of the northern Ocean Procellarum landing area (solicited talk)
Qian Yuqi, Xiao Long, Zhao Jiannan, Zhao Siyuan, Flahaut Jessica, Martinot Melissa, Hiesinger Harry, Head James, Huang Jun

11:05–11:25: EPSC2018-587
First results at asteroid (162173) Ryugu from the Hayabusa2 near-infrared spectrometer NIRS3 (solicited talk)
Kitazato Kohei, Iwata Takahiro, Abe Masanao, Ohtake Makiko

11:25–11:45: EPSC2018-330
OSIRS-REx@Bennu and Hayabusa2@Ryugu: thermal modelling of sample return mission target asteroids (solicited talk)
Delbo Marco, Walsh Kevin, Okada Tatsuaki, Tanaka Satoshi, Sakatani Naoya, Senshu Hiroki, Bibring Jean-Pierre

11:45–12:00: EPSC2018-902
Laboratory studies on thermal modification of mineral reflectance spectra in support of OSIRIS-Rex mission
Poggiali Giovanni, Brucato John Robert, Fornaro Teresa, Corazzi Maria Angela

12:00–12:15: EPSC2018-752
Mars Sample Return Science—How Should it be Organised Into Objectives?
Smith Caroline and the International Mars Sample Return Samples and Objectives Team (iMOST)

12:15–12:30: EPSC2018-1057
Mars Sample Return Engineering - A reference architecture for joint ESA-NASA studies and early mission concepts
Vijendran Sanjay, Edwards Charles, Muirhead Brian, Huesing Jakob, Duvet Ludovic, Beyer Friederike

12:30 Lunch break
**European Planetary Science Congress 2018**

**SB14 Small Bodies as Granular Systems**

**Convener:** Daniel Hestroffer  
**Co-conveners:** Nicolas Taberlet; Paolo Tanga  
**Lecture Room:** Venus

**10:45–12:30**  
**Chairperson:** Hestroffer

**10:45–11:00: EPSC2018-800**  
Experimental Insights on the Densification of Regoliths by Thermal Cycling  
*Curren Ivy,* Aharonson Oded

**11:00–11:15: EPSC2018-214**  
Sintering of micrometer-sized water-ice particles  
*Gundlach Bastian,* Ratte Judy, Blum Jürgen, Oesert Joachim, Gorb Stanislav N.

**11:15–11:30: EPSC2018-1056**  
A code for the study of gravitational aggregates with non-spherical particles  
*Ferrari Fabio,* Lavagna Michèle

**11:30–11:45: EPSC2018-581**  
Numerical simulations of a lander's interaction with a low-gravity asteroid regolith surface: application to MASCOT on board Hayabusa2  
*Thuiliet Florian,* Michel Patrick, Maurel Clara, Ballouz Ronald-Louis, Zhang Yun, Richardson Derek C., Biele Jens, Tatsumi Eri, Sugita Seiji

**11:45–12:00: EPSC2018-801**  
Thermal Inertia of Binary Near-Earth Asteroids  

**12:00–12:15: EPSC2018-421**  
An Ultra-Low-Gravity Centrifuge in Low-Earth Orbit  
*Schwartz Stephen,* Asphaug Erik, Thanga Jekan, Nallapu Ravi, Vance Leonard

**12:15–12:30: EPSC2018-568**  
What's Inside a Rubble Pile Asteroid? DISCUS - a Tomographic Twin Radar Cubesat to Find Out  
*Deller Jakob,* Patrick Bambach, Esa Vilénius, Sampsa Pursianen, Mika Takala, Braun Hans Martin, Lentz哈尔德, Wittig Manfred

**END OF ORAL PROGRAMME SB14**

**SB16 Observing and modelling meteors in planetary atmospheres**

**Convener:** Maria Gritsevich  
**Co-conveners:** Jürgen Oberst; Apostolos Christou; Elizabeth Silber; Josep Maria Trigo-Rodriguez  
**Lecture Room:** Venus

**16:15–17:55**  
**Chairperson:** Maria Gritsevich

**16:15–16:35: EPSC2018-775**  
Extra-terrestrial meteors: a review (solicited talk)  
*Christou Apostolos,* Vaubalion Jeremy, Withers Paul, Hueso Ricardo

**16:35–16:55: EPSC2018-1226**  
Investigating fireball flight in three dimensions (solicited talk)  
*Sansom Eleanor,* Jansen-Sturgeon Trent, Rutten Mark, Devillepoix Hadrien, Bland Philip

**16:55–17:10: EPSC2018-976**  
Computing mass indices of meteor showers with BRAMS data  
*Lamy Hervé,* Anciaux Michel, Verbeeck Cis, Tétard Cédric, Calders Stijn, Martinez Picancio

**17:10–17:25: EPSC2018-271**  
Redox reactions in meteoroid atmospheric entry reproduced in plasma experiments  
17:25–17:40: EPSC2018-495
Shock layer radiation of an evaporating meteor
Dias Bruno, Scoggins James B., Magin Thierry

Simulating Atmospheric Alteration to Micrometeorites using a Two Stage Light Gas Gun.

17:55 Break

18:15–20:05
Chairperson: Jürgen Oberst

18:15–18:30: EPSC2018-1105
FRIPON and IMPACT projects to pinpoint interplanetary matter in the centimetre - hundred meter range (solicited talk)

18:30–18:45: EPSC2018-826
Meteor activities within the BigSkyEarth COST Action: enabling new approaches in modeling and observations (solicited talk)
Butka Peter, Vinković Dejan, Grittsevich Maria, Cellino Alberto, Bertaina Mario, Mönkölä Sanna, Moreno-Ibáñez Manuel, Nico Giovanni, Nina Aleksandra, Srećković Vladimir, Mitrović Srdjan, Mateus Pedro

18:45–19:00: EPSC2018-812
Validation of Knudsen numbers and flow regimes for well-characterized centimetre-sized meteoroids (solicited talk)
Moreno-Ibáñez Manuel, Silber Elizabeth A., Grittsevich Maria, Trigo-Rodríguez Josep M.

19:00–19:10: EPSC2018-1093
Russian fireball network for meteorite recovery and meteor observations
Kruglikov Nikolai A., Krushinsky Vadim, Nazarov Sergey, Kukov Oleg, Yankovsky Ilya, Grokhovsky Viktor, Borbolin Andrey, Kruglikov Nikolai N.

The Perseids: Results from 7 years of observations with the SPOSH camera
Margonis Anastasios, Oberst Jürgen, Christou Apostolos

19:20–19:35: EPSC2018-546
Regular and transitory showers of comet C/1979 Y1
Hadjukova Maria, Neslusan Lubos

19:35–19:50: EPSC2018-397
Geminid meteor shower activity should increase
Ryabova Galina, Rendtel Jurgen

19:50–20:05: EPSC2018-946
Impact-classification scheme based on the fireball analysis: a preliminary study
Gritsevich Maria, Silber Elizabeth

END OF ORAL PROGRAMME SB16
SB19/OPS12/EXO6 Planetary Rings (co-organized)

Convener: Holger Hoffmann
Co-conveners: Jürgen Schmidt; Frank Spahn
Lecture Room: Uranus

10:45–12:25
Chairperson: Holger Hoffmann

10:45–11:05: EPSC2018-177
Cassini observations of the outer edge of Saturn’s A ring (solicited talk)
Murray Carl, Cooper Nicholas

11:05–11:25: EPSC2018-1277
What confines the rings of Saturn? (solicited talk)
Tajeddine Radwan, Nicholson Philip D., Longaretti Pierre-Yves, El Moutamid Maryame, Burns Joseph A.

11:25–11:35: EPSC2018-756
Hydrodynamic Simulations of Asymmetric Propeller Structures in the Saturnian Ring System
SSELLER Michael, Seiß Martin, Hoffmann Holger, Spahn Frank

11:35–11:45: EPSC2018-1224
Modelling the size-distribution and granular velocity distribution in Saturn’s rings
Seyfarth Eric, Spahn Frank

11:45–11:55: EPSC2018-1113
Spin-orbit resonances around an ringed elongated body: beyond the first order
Sicardy Bruno

11:55–12:05: EPSC2018-1198
Apse-alignment in narrow-eccentric ringlets. The comparative case of the ε-ring of Uranus and the ring system of (10199) Chariklo
Melita Mario

12:05–12:15: EPSC2018-1225
The dust environment of Saturn within Saturn’s D ring: CDA results of the Grand Finale of Cassini

Detecting rings around exoplanets
Akinsanmi Babatunde, Oshagh Mahmoudreza, Santos Nuno, Barros Susana

Poster Introduction
Outreach, Education and Policy

OEP3 Europlanet Public Engagement Prize and Funding Scheme Showcase

Convener: Eleni Chatzichristou
Lecture Room: Venus

14:00–15:45
Chairperson: Eleni Chatzichristou

14:00–15:25: Europlanet Funding Winners will shortly present their winning projects (details are given in the poster session)

15:25–15:45: Europlanet Prize Winners will discuss efforts to engage audiences with planetary science (details are given in the poster session)

END OF ORAL PROGRAMME OEP3
TP5 Atmospheres of terrestrial planets

Convener: Anni Määttänen
Co-conveners: Olivier Witasse; Francisco González-Galindo; Dmitrij Titov
Lecture Room: Saturn

08:30–10:00

Mars middle and lower atmosphere - observations

08:30–08:45: EPSC2018-911
Retrieval and characterization of carbon monoxide (CO) vertical profiles in the Martian atmosphere from observations of PFS/MEX
Bouche Jimmy, Giuranna Marco, Coheur Pierre-François, Aoki Shohei, Robert Séverine, Wolkenberg Paulina, Vandaele Ann Carine, Erwin Justin T., Daerden Frank, Bauduin Sophie

08:45–09:00: EPSC2018-708
Creating a priori atmospheres from GEM-Mars GCM for the investigation of Mars
Erwin Justin, Neary Lori, Daerden Frank, Viscardy Sébastien, Aoki Shohei, Robert Séverine, Vandaele Ann Carine

09:00–09:15: EPSC2018-434
Impact of gradients at the Martian terminator on the retrieval of ozone from SPICAM/MEx
Piccialli Arianna, Vandaele Ann Carine, Trompet Loïc, Neary Lori, Viscardy Sébastien, Daerden Frank, Robert Severine, Aoki Shohei, Willame Yannick, Wilquet Valerie, Lefèvre Franck, Määttänen Anni, Montmessin Franck

09:15–09:30: EPSC2018-564
Analysis of Recalibrated Phoenix Relative Humidity Sensor Data
Fischer Erik, Martinez German, Renno Nilsson

09:30–09:45: EPSC2018-1029
Spectral Scan and Line Catalogue of the Martian Atmosphere from Herschel/HIFI Observations
Rengel Miriam, Jarchow Christopher, Hartogh Paul

Pluto

09:45–10:00: EPSC2018-600
High resolution 3D global climate modelling of Pluto’s atmosphere to interpret New Horizons observations
Bertrand Tanguy, Forget Francois

END OF ORAL PROGRAMME TP5

TP6/SB21 Ionospheres of Unmagnetized Bodies in the Solar System: Terrestrial Planets and comets (co-organized)

Convener: Beatriz Sanchez - Cano
Co-conveners: Pierre Henri; Francisco González-Galindo; Chris Fowler; Matteo Crismani
Lecture Room: Neptune

14:00–15:45
Chairpersons: Beatriz Sanchez-Cano, Pierre Henri

14:00–14:15: EPSC2018-97
Overview of the Ionosphere of Unmagnetized Solar System Bodies (solicited talk)
Cravens Thomas

14:15–14:30: EPSC2018-274
Cometary plasma response to interplanetary corotating interaction regions during 2016 June - September: a quantitative study by the Rosetta Plasma Consortium

14:30–14:45: EPSC2018-605
The Martian Ionosphere’s Response to Solar drivers
Andersson Laila, Fowler Chris, Fillingam Matt, Halekas Jasper, Espley Jared, Thiemann Ed, Mitchell Dave, McFadden Jim, Elrod Meredith, DiBraccio Gina

14:45–15:00: EPSC2018-964
Observations of a Solar Energetic Particle event from inside the comet 67P coma and upstream of the comet
Weller Brock Anne, Jones Geraint, Coates Andrew, Simon Wedlund Cyril, Goetz Charlotte, Dressing Nina, Nordheim Tom, Mande Kathleen, Hajra Rajkumar, Myllys Minna, Henri Pierre, Nilsson Hans

15:00–15:15: EPSC2018-33
Corkscrew Flow Motion of Planetary Ions in the Venus Plasma Wake
Perez-de-Tejada Hector, Lundin Rickard

Variability of the martian upper ionosphere and ion escape
Dubinin Eduard, Fraenz Markus, Paetzold Martin, Andersson Laila, McFadden Jim, Halekas Jasper, Connerney Jack, Eparvier Frank, Mahaffy Paul, Vaisberg Oleg, Zelenyi Lev

15:30–15:45: EPSC2018-940
Modelling Flux Ropes in the Ionosphere of Titan
Martin Carley, Arridge Chris, Badman Sarah, Ray Licia, Russell Christopher, Wei Haiying, Dougherty Michele

15:45 Coffee break
16:15–18:00
Chairpersons: Pierre Henri, Francisco Gonzalez-Galindo

16:15–16:30: EPSC2018-417
Comparative aeronomy of cometary and planetary ionospheres: solar energy deposition and plasma loss (solicited talk)
Beth Arnaud

16:30–16:45: EPSC2018-137
MARSIS observations of field-aligned irregularities and ducted radio propagation in the Martian ionosphere
Andrews David, Opengenorth Hermann, Leyser Thomas, Bucher Stephan, Edberg Niklas, Morgan David, Garnett Donald, Kopf Andrew, Fallows Katy, Withers Paul

16:45–17:00: EPSC2018-954
Temperature anisotropies of proton velocity distributions in the plasma environment of Venus
Bader Alexander, Stenberg Wieser Gabriella, André Mats, Wieser Martin, Futuana Yoshifumi, Persson Moa, Nilsson Hans, Zhang Tielong

17:00–17:15: EPSC2018-1094
Cold Electrons at Comet 67P

17:15–17:30: EPSC2018-707
First Global Model of Meteoric Magnesium in the Martian Atmosphere
Plane John, González-Galindo Francisco, Carrillo-Sánchez Juan Diego, Chaufray Jean-Yves, Forget Francois, Crismani Matteo, Schneider Nicholas

17:30–17:45: EPSC2018-993
Low energy ion measurements at comet 67P
Johansson Fredrik Leffe, Odellstad Elias, Vigren Erik, Eriksson Anders, Henri Pierre

17:45–18:00: EPSC2018-444
Indirect identification of a low-altitude layer in the Martian nightside ionosphere during a space weather event with Mars Express-MARSIS radar data
Sanchez - Cano Beatriz, Lester Mark, Witasse Olivier, Cartacci Marco, Bielly Pierre-Louis, Opengenorth Hermann, Leblanc François, Lillis Rob, Floury Nicolas

END OF ORAL PROGRAMME TP6/SB21

Lunar Science and Exploration

LSE1/TP15 Late Accretion of the Moon, Earth, and other Terrestrial Planets (co-organized)

Convener: Gregory Michael
Co-conveners: Elena Martellato; Sabrina Schwinger; Emily Worsham
Lecture Room: Venus

08:30–10:15
Chairpersons: S. Schwinger, E. Worsham

08:30–08:45: EPSC2018-196
Sequential Giant Impacts
Emsenhuber Alexandre, Asphaug Erik

08:45–09:00: EPSC2018-121
Application of Machine Learning to Giant Impact Studies
Cambioni Saverio, Gabriel Travis J.S, Asphaug Erik, Furfaro Roberto, Emsenhuber Alexandre, Schwartz Stephen

09:00–09:15: EPSC2018-501
Realistic modeling of water transport to terrestrial planets by combining long-term dynamics and collision physics
Burger Christoph, Schäfer Christoph, Bazso Akos

09:15–09:30: EPSC2018-688
A long-lived lunar magma ocean
Maxime Maurice, Tosì Nicola, Schwinger Sabrina, Breuer Doris

09:30–09:45: EPSC2018-1097
A Single Plume Upwelling on Lunar Near Side that Provides a Source for Titanium-rich Volcanism
Zhao Yue, Plesa Ana-Catalina, Breuer Doris, Laneuvile Matthieu, van Westrenen Wim

09:45–10:00: EPSC2018-566
The effect of temperature distribution in the lunar mantle on the bulk composition of the Moon
Ekaterina Kronrod, Kuskov Oleg, Kronrod Victor

10:00–10:15: EPSC2018-360
The age of lunar impact melt rock 67935 - Imbrium or not?
Haber Thomas, Scherer Erik E.

END OF ORAL PROGRAMME LSE1/TP15
**LSE5 Lunar Volatiles**

**Convener:** Kathleen Mandt  
**Co-conveners:** Olivier Mousis; Wes Patterson; Elliot Setton-Nash  
**Lecture Room:** Venus

**10:45–12:30**

**Chairpersons:** Elliot Setton-Nash & Kathleen Mandt

**10:45–11:00:** EPSC2018-238
The Depth of Simple Craters and the Shadows they Cast: Evidence for Ice on Mercury and the Moon (withdrawn).  
**Rubanenko Lior,** Venkatraman Jaahvnee, Paige David

**11:00–11:15:** EPSC2018-450
Estimating sub-pixel lunar block distributions  
**Klem Susan,** Robinson Mark

**11:15–11:30:** EPSC2018-530
Probing the volatile reservoirs in the Moon using lunar meteorites  
**Anand Mahesh,** Stephant Alice

**11:30–11:45:** EPSC2018-1091
Far-IR Emissivity in Lunar South Polar Permanently Shaded Terrain: Apparent Temperature Dependence  
**Sefton-Nash Elliot,** Williams Jean-Pierre, Bandfield Joshua, Warren Tristram, Greenhagen Benjamin, Paige David

**11:45–12:00:** EPSC2018-729
Mini-RF S- and X-band Bistatic Observations of South Polar Craters on the Moon  
**Patterson Wes,** Prem Parvathy, Stickle Angela, Cahill Joshua

**12:00–12:15:** EPSC2018-1123
Observations of illumination conditions in the Permanently Shadowed Regions (PSRs) with LRO-LAMP  
**Mandt Kathleen,** Mazarico Erwan, Greathouse Thomas, Retherford Kurt, Gladstone G. Randall, Byron Ben, Hurley Dana, Stickle Angela, Patterson G. Wes, Hendrix Amanda, Williams Jean-Pierre, Liu Yang, Lemelin Myriam

**12:15–12:30:** EPSC2018-1028
In-situ analysis of lunar regolith with the gas chromatograph-neutral gas mass spectrometer on the Luna-Resurs lander  
**Fausch Rico,** Wurz Peter, Lase Davide, Tulej Marek, Cabane Michael, Szopa Cyril, Sapgir Alexandr, Gerasimov Mikhail

END OF ORAL PROGRAMME LSE5

**LSE6/MTI10 Science and Innovation for the Moon Village and beyond (co-organized)**

**Convener:** Bernard Foing  
**Co-conveners:** Chrysa Avdellidou; Germaine Van der Sanden; Christiane Heinicke  
**Lecture Room:** Venus

**14:00–15:45**

**14:00–14:15:** EPSC2018-176
Environmental ethics in outer space - Long term sustainability of the human species  
**Owe Andrea**

**14:15–14:30:** EPSC2018-322
Moon and Mars habitation in lava tubes: The first explorers will be cave men again. Stefánshellið test site in Iceland  
**Gasser Martin,** Dunn Michael Chalmer

**14:30–14:45:** EPSC2018-347
LOGOS : Lunar Organisms, GeoMicrobiology and Organic Compound Space Experiment  
**de Vera Jean-Pierre Paul** and the LOGOS Team

**14:45–15:00:** EPSC2018-349
Future Low-Cost Lunar and Planetary Missions Enabled by Commercial Space Companies  
**Bernstain Alain,** Richards Robert

**15:00–15:15:** EPSC2018-599
Updated Design Concepts of the Moon and Mars Base Analog (MaMBA)  
**Heinicke Christiane,** Orzechowski Leszek, Abdullah Rawel, von Einem Maria, Arnhof Marlies

**15:15–15:30:** EPSC2018-720
NASA SSERVI: Merging Science and Human Exploration  
**Schmidt Gregory,** Gibbs Kristina, Bailey Brad, Pendleton Yvonne

**15:30–15:45:** EPSC2018-713
NASA’s Solar System Exploration Research Virtual Institute: Building Collaboration Through International Partnerships  
**Gibbs Kristina,** Schmidt Greg, Pendleton Yvonne, Bailey Brad

**15:45 Coffee break**

**16:15–18:00**

**16:15–16:30:** EPSC2018-999
HERACLES - Exploring the Moon in an International Context  
**Landgraf Markus,** Carey William, Hipkin Victoria, Carpenter James, Hiesinger Harald

**16:30–16:45:** EPSC2018-1015
Surface characterization of potential lunar polar landing sites with accuracy up to 7 m  
**Djachkova Maya,** Mitrofanov Igor, Sanin Anton, Litvak Maxim, Tretiakov Vladislav
16:45–17:00: EPSC2018-1247
EuroMoonMars Workshop 2018: a pilot study on a semi-autonomous laboratory module for analogue simulations

van der Sanden Germaine, Foing Bernard, Clavé Elise, Dubois Louis and the EuroMoonMars 2018 team

17:00–17:15: EPSC2018-1253
Considerations on instruments for astrobiological investigations in a Moon/Mars laboratory

Baque Mickael, Verseux Cyprien, de Vera Jean-Pierre, Heinicke Christiane

17:15–17:30: EPSC2018-1255
Synergies between geological laboratory analyses on the Moon and Mars

Adel Solmaz, Ormø Jens, Jaret Steven, Heinicke Christiane

17:30–17:45: EPSC2018-1256
The JULES VERNE 2028 project

Foucher Frédéric and the Jules Verne 2028 consortium

17:45–18:00: EPSC2018-1278
Planetary Science in Analogs in Lunares habitat.

Kołodziejczyk Agata, Harasymczuk Matt, Orzechowski Leszek, Lillo Arthur, Foing Bernard

END OF TUESDAY ORAL PROGRAMME LSE6/MTI10
ORAL PROGRAMME LSE6/MTI10 CONTINUES ON FRIDAY

Outer Planet Systems

OPS1 Outer planets systems and Pluto

Convener: Athena Coustenis
Co-conveners: Glenn Orton; Sushil K. Atreya; Leigh Fletcher; Nicolas Altobelli
Lecture Room: Jupiter

10:45–12:15 Chairpersons: A. Coustenis and N. Krupp

10:45–11:00: EPSC2018-590
Exploring the Atmosphere of Jupiter with Ultraviolet Spectroscopy

Melin Henrik, Fletcher Leigh, Antunano Martin Arrate, Blake James, Donnelly Padra, Rowe-Gurney Naomi

11:00–11:15: EPSC2018-834
Forward and inverse kinetic energy cascades in Jupiter’s turbulent weather layer

Young Roland, Read Peter

11:15–11:30: EPSC2018-949

Krupp Norbert, Palmears Benjamin, Roussos Elias, Fraenz Markus, Bagental Fran, Wilson Robert, Paranicas Chris, Khurana Krishan

11:30–11:45: EPSC2018-1050
Modeling atmospheric dynamics in Jupiter’s troposphere

Boissinot Alexandre, Spiga Aymeric, Guerlet Sandrine, Cabanes Simon

11:45–12:00: EPSC2018-79
Saturn atmospheric dynamics after Cassini from ground-based observations in the visible punctuated by HST/OPAL yearly observations

Hueso Ricardo, Sánchez-Lavega Agustín, Simon Amy, Wong Mike, Delcroix Marc, Rojas Jose Félix, Colas François, Gómez-Forrellad Josep Maria, Barry Trevor

12:00–12:15: EPSC2018-185
A new polar storm and a long-lived equatorial disturbance in Saturn’s post-Cassini era


12:15 Lunch break

14:00–15:45 Chairpersons: R. Hueso and S. Rafkin

14:00–14:15: EPSC2018-898
Survey of lion roar emissions observed in Saturn’s magnetosheath by Cassini

Piša David, Sulaiman Ali H., Santolik Ondrej, Hospodarsky George B., Kurth William S., Garnett Donald A.

14:15–14:30: EPSC2018-247
Formation of Saturn’s small inner moons by collisions of similar-sized moonlets

Leleu Adrien, Jutzi Martin, Rubin Martin

14:30–14:45: EPSC2018-306
Saturn’s decisive role in the formation of the Galilean system

Ronnet Thomas, Mousis Olivier, Vernazza Pierre, Lunine Jonathan, Crida Aurélien

14:45–15:00: EPSC2018-569
Giant Impacts Around Saturn

Asphaug Erik, Emsenhuber Alexandre

15:00–15:15: EPSC2018-208
The deep winds of Jupiter and Saturn as inferred from recent gravity measurements - similarities and differences

Galanti Eli, Kaspi Yohai, Durante Daniele, Racicopa Paolo, less Luciano

15:15–15:30: EPSC2018-169
Evolution of Titan’s atmospheric temperature and composition near the poles from Cassini/CIRS

Coustenis Athena, Jennings Donald, Achterberg Richard, Bampasidis Georgios, Nixon Conor, Lavvas Panayotis, Cottini Valeria, Flasar F. Michael
15:30–15:45: EPSC2018-167
The spectral nature of Titan’s major geomorphological surface units: constraints on the composition

15:45 Coffee break

16:15–18:00
Chairpersons: A. Solomonidou and P. Lawas

16:15–16:30: EPSC2018-195
UV irradiation of Titan organic haze
Carrasco Nathalie, Tigrine Sarah, Gavilan Lisseth, Nahon Laurent, Gudipati Murthy

16:30–16:45: EPSC2018-597
Exploring Titan’s Meteorology with Dragonfly
Rafkin Scot, Lorenz Ralph, Turtle Elizabeth, Barnes Jason, Trainer Melissa, Le Gall Alice, Lora Juan, McKay Chris, Newman Claire, Panning Mark, Tokano Tetsuya, Wilson Colin

16:45–17:00: EPSC2018-667
Probing the Atmospheres of Saturn and Uranus with Ground-Based Radio Observations
Hofstadter Mark, Adumitroaie Virgil, Atreya Sushil, Butler Bryan

17:00–17:15: EPSC2018-584
Unusual Magnetic Fields of Neptune and Uranus
Nellis William

17:15–17:30: EPSC2018-172
Stellar Occultation of Triton on October 5th, 2017
Marques Oliveira Joana, Sicardy Bruno, Meza Erick, Desmars Josselin, Lecacheux Jean, Assafin Marcelo, Camargo Julio, Ortiz Jose Luis, Santos-Sanz Pablo, Beisker Wolfgang, Kretlow Mike, Leiva Rodrigo, Bérard Diane and the Triton Occultation

17:30–17:45: EPSC2018-218
Pluto’s and Triton’s hazes
Lavvas Panayotis

17:45–18:00: EPSC2018-1283
30 Years of H$_2^+$ Planetary Astronomy
Miller Steve

END OF ORAL PROGRAMME OPS1

OPS3 Ocean worlds and Icy Moons

Convener: Alex Hayes
Co-conveners: Jean-Pierre Lebreton; Olivier Witasse; Athena Coustenis; Elizabeth Turtle; Federico Tosi
Lecture Room: Jupiter

08:30–10:15
Chairperson: Jean-Pierre Lebreton

08:30–08:45: EPSC2018-440
Radar sounding of Jovian icy moons: a simulation approach to active and passive sounding scenarios
Gerekos Christopher, Bruzzone Lorenzo

08:45–09:00: EPSC2018-361
Time scale of cryomagma eruptions on Europa
Lesage Elodie, Massol Hélène, Schmidt Frédéric

09:00–09:15: EPSC2018-75
Dehydration kinetics of halite under UV irradiation
Jost Bernhard, Hodyss Robert, Johnson Paul V

09:15–09:30: EPSC2018-83
Polarimetry of water ice particles providing insights on grain size and degree of sintering on icy planetary surfaces
Cerubini Romain, Poch Olivier, Pommerol Antoine, Schmid Hans-Martin, Jost Bernhard, Brouet Yann, Thomas Nicolas

09:30–09:45: EPSC2018-290
Ice World Oceans, Salt Grains and Hypervelocity Impacts
Burchell Mark, Fisher Calum, Price Mark, New James, Butterworth Anna, Mathies Richard

09:45–10:00: EPSC2018-579
Comprehensive high-pressure ices EOS for icy world interior
Journaux Baptiste, Brown J. Michael, Pakhomova Anna, Collings Ines, Petitgirard Sylvain, Ott Jason

10:00–10:15: EPSC2018-563
Triton: Exploring a Candidate Ocean World
Prockter Louise, Mitchell Karl, Bearden David, Smythe William

END OF ORAL PROGRAMME OPS3

Magnetospheres and Space Physics

MSP1/MD9 Planetary space weather (co-organized)

Convener: Nicolas André
Co-conveners: Manuel Grande; Jean Lilensten; Christina Plainaki; Maria Kotelnikova; Sergey Starchenko
Lecture Room: Neptune

08:30–10:00
Chairperson: Manuel Grande

08:30–08:45: EPSC2018-27
Planetary Space Weather Services for the Europlanet 2020 Research Infrastructure
André Nicolas, Grande Manuel, Team Psws

08:45–09:00: EPSC2018-918
Validity of planetary space weather predictions
Opitz Andrea, Szabo Klaudia, Dalya Zsuzsanna, Timar Aniko, Dosa Melinda, Nemeth Zoltan, Szego Karoly, André Nicolas

09:00–09:15: EPSC2018-324
A Proxy for the Upstream IMF Clock Angle at Mars
Hurley Dana M., Dong Yaxue, Fang Xiaohua, Brain David A.
Tuesday – Oral programme

09:15–09:30: EPSC2018-872
Detection and dynamics of Martian plasma boundaries

09:30–09:45: EPSC2018-1082
Radiation environment at candidate landing sites on Mars: effects of Solar activity and of albedo neutrons for different mineralogical content
**Da Pieve Fabiana**, Botek Edith, Vandaele Ann Carine

09:45–10:00: EPSC2018-9
Solar Radiation for Protection of Solar Radiation on Spacecrafts and Lunar Settlements. Or the use of Miniature Magnetoospheres Induced by the Photoelectric Effect
**Arias Francisco J**

END OF ORAL PROGRAMME MSP1/MD9

**MSP2/MD8 Global modelling and remote sensing of planetary magnetospheric dynamics (co-organized)**

Conveners: Graziella Branduardi-Raymont
Co-conveners: Caitríona Jackman; Norbert Krupp
Lecture Room: Neptune

10:45–12:30
Chairperson: G. Branduardi-Raymont

10:45–10:50: Introduction

10:50–11:05: EPSC2018-15
Limit Cycles in a Toy Model of "Earth-like" Magnetotail Dynamics
**Burston Robert**

11:05–11:20: EPSC2018-332
Subsolar magnetopause and cusp positions: comparison of MHD and empirical models
**Samsonov Andrey**, Branduardi-Raymont Graziella

11:20–11:35: EPSC2018-350
Constraining Ganymede’s exosphere through numerical simulations of its ionosphere and Galileo observations
**Carnielli Gianluca**, Galand Marina, Modolo Ronan, Leblanc François, Beth Arnaud, Huybrighs Hans, Jia Xianzhe

11:35–11:50: EPSC2018-619
Imaging of energetic neutral atoms with the Jovian Neutral Atoms Analyser onboard JUICE: Charge exchange ENAs near Ganymede
**Neuland Mäike Brigitte**, Futaha Yoshifuma, Fatemi Shahab, Shimoyama Manabu, Vorburger Audrey, Wurz Peter, Wieser Martin, Barabash Stas

11:50–12:05: EPSC2018-1234
Saturn’s northern aurorae at solstice from HST observations coordinated with Cassini’s Grand Finale (withdrawn)
**Lamy Laurent**, Prangé Renée, Tao Chihiro, Kim Tae, Badman Sarah, Zarka Philippe, Cecconi Baptiste, Kurth William, Pryor Wayne, Bunce Emma, Radioti Aikaterina

12:05–12:20: EPSC2018-1257
Magnetono-convection scaling in the Terrestrial planets
**Starchenko Sergey**

12:20–12:30: Poster highlights and Conclusions

END OF ORAL PROGRAMME MSP2/MD8

**Modelling and Database**

**MD4 Solar and Planetary Data system Interoperability**

Conveners: Baptiste Cecconi
Co-conveners: Stéphane Erard; Vincent Génot;
Angelo Pio Rossi
Lecture Room: Uranus

08:30–10:15

08:30–08:45: EPSC2018-348
Virtual European Solar & Planetary Access (VESPA): Year 3

08:45–09:00: EPSC2018-445
PlanetServer - A web GIS and Python API for planetary hyperspectral images analysis
**Marco Figuera Ramiro**, Pham Huu Bang, Pio Rossi Angelo, Minin Mikhail, Baumann Peter

09:00–09:15: EPSC2018-529
SSHADE: the European solid spectroscopy database infrastructure
**Schmitt Bernard**, Bollard Philippe, Garenne Alexandre, Albert Damien, Bonal Lydie, Poch Olivier and the SSHADE Consortium

09:15–09:30: EPSC2018-799
Data exploration in the ESA Planetary Science Archive - current status and future plans
**Bentley Mark**, Barthelemy Maud, Besse Sebastien, Fraga Diego, Grotheer Emmanuel, Heather Dave, Martinez Santa, Merin Bruno, De Marchi Guido, Lim Tanya

09:30–09:45: EPSC2018-822
MASER: A Toolbox for Low Frequency Radio Astronomy
**Cecconi Baptiste**

09:45–10:00: EPSC2018-1058
The Use of Git in Planetary Science Research
**Frigeri Alessandro**
10:00–10:15: EPSC2018-1194
MATISSE web-tool functions integration into VESPA-Europlanet 2020 infrastructure: real-time computation and visualization of aerodynamic coefficients for convex objects moving in a rarefied gas field
Ivanovski Stavro, Zinzi Angelo, Capria Maria Teresa, Giardino Marco, Erard Stephane, Longobardo Andrea, Fonte Sergio, Antonelli Angelo, Della Corte Vincenzo, Rotundi Alessandra, Zakharov Vladimir

END OF ORAL PROGRAMME MD4

Exoplanets and Origins

EXO3 Future instruments to detect and characterise extrasolar planets
Convener: Paul Eccleston
Co-conveners: Camilla Danielski; Enzo Pascale
Lecture Room: Mars

08:30–10:15: EPSC2018-1230
The Transiting Exoplanet Survey Satellite (TESS): Searching for Planets Around Nearby Stars
Rinehart Stephen

08:30–08:55: EPSC2018-82
CHEOPS, presentation of the scientific program of the mission consortium
Queloz Didier, Benz Willy

08:55–09:15: EPSC2018-969
PLATO Science: main goals and expected achievements
Piotto Giampaolo

09:15–09:30: EPSC2018-1020
PLATO: the instrument and the science preparation
Pagano Isabella and the PLATO collaboration

09:45–10:05: EPSC2018-184
A summary of the payload design for ARIEL
Eccleston Paul, Tinetti Giovanna

10:05–10:15: EPSC2018-975
Twinkle - A Commercial Space Science Satellite
Tessenyi Marcel, Tinetti Giovanna, Tennyson Jonathan, Savini Giorgio, Edwards Billy, Pascale Enzo, Jason Susan, Vora Amar

10:15 Coffee break

10:45–12:30
Chairperson: Camilla Danielski

10:45–11:00: EPSC2018-1055
The JWST Transiting Exoplanet Community Early Release Science Program
Crouzet Nicolas and the JWST Transiting Exoplanet ERS Team

11:00–11:15: EPSC2018-923
The JWST Early Release Science Program for Directly Imaging Exoplanetary Systems
Hinkley Sasha, Carter Aarynn, Biller Beth, Skemer Andrew

11:15–11:30: EPSC2018-621
VUV Spectroscopy for terrestrial exoplanetary exosphere
Kameda Shingo, Tavrov Alexander, Osada Naoya, Murakami Go, Enya Keigo, Ikoma Masahiro, Narita Norio, Koroblev Oleg

Future Ground Based Facilities and Instruments

11:30–11:45: EPSC2018-778
Giant planet direct imaging with first light instruments on ELT
Boccaletti Anthony

11:45–12:00: EPSC2018-958
Expected performance of ELT/HARMONI for giant exoplanets detection and characterization (withdrawn)
Vigan Arthur, Carlotti Alexis, Mouillet David, Chauvin Gaël

12:00–12:15: EPSC2018-1267
The ExoLife Finder Telescope (ELF) : an extremely large telescope dedicated to extremely high contrast
Langlois Maud

12:15–12:30: EPSC2018-1147
NIRPS: Near-Infrared Planet Searcher to join HARPS on the ESO 3.6-m telescope
Bouchy Francois, Doyon Rene

END OF ORAL PROGRAMME EXO3

EXO4/TP14/OPS9/MD6 Matter Under Planetary Interior Conditions (co-organized)

Convener: Frank Sohl
Co-conveners: Martin French; Zuzana Konopkova; Sebastiano Padovan
Lecture Room: Mars

14:00–15:35
Chairpersons: F. Sohl, Z. Konopkova

14:00–14:15: EPSC2018-1235
Miscibility gap of hydrogen-helium mixtures
Schöttler Manuel, Redmer Ronald

14:15–14:30: EPSC2018-276
Towards a new tool for modelling non-adiabatic giant planets
Scheibe Ludwig, Nettelmann Nadine, Redmer Ronald
Small Bodies (comets, KBOs, rings, asteroids, meteorites, dust)

SB4 Asteroids and parent bodies of meteorites: Observations, experiments, models

Convener: Wladimir Neumann
Co-conveners: Marco Ferrari; Sabrina Schwinger; Eleonora Ammannito; Ottaviano Ruesch
Lecture Room: Saturn

10:45–12:25
Chairpersons: Wladimir Neumann, Sabrina Schwinger, Marco Ferrari

10:45–11:05: EPSC2018-1205
The chronology of formation of solids and meteorite parent bodies in the early solar system (solicited talk)
Trieloff Mario

11:05–11:25: EPSC2018-325
Asteroids observations from the ground and space: implications for our understanding of the Main Belt and of asteroid families (solicited talk)
Delbo Marco

11:25–11:40: EPSC2018-741
Extended photometric survey of Near-Earth Objects
Ieva Simone, Dotto Elisabetta, Mazzotta Epifani Elena, Perna Davide, Rossi Alessandro, Di Paola Andrea, Giunta Alessio, Micheli Marco, Perrozzi Ettore, Specziali Roberto, Lazzarini Monica, Bertini Ivano, Ochner Paolo, Petropoulou Vasiliki, Lazzaro Daniela, Arcoverde Plicida, Medeiros Hissa, Monteiro Filipe

Dreams came true - the first results from inversion of Gaia DR2 asteroid photometry
Durech Josef, Harus Josef

11:55–12:10: EPSC2018-953
Astrometry and photometry of TNOs and asteroids using Gaia DR2
Duffard Rene, Santos-Sanz Pablo, Morales Nicolas, Ortiz Jose Luis

Using Gaia DR2 Asteroid Data: Recommendations and Example Applications
Tanga Paolo, Spoto Federica

12:25 Lunch break

14:00–15:40
Chairpersons: Wladimir Neumann, Sabrina Schwinger, Marco Ferrari

14:00–14:10: EPSC2018-202
Ground Observation of asteroids at mission ETA through JPL Horizons and SPICE
Paganelli Flora, Conrad Albert R., Costa Sitjà Marc

14:10–14:20: EPSC2018-591
Unique Multi-Tailed Active Asteroid 311P/(2013 P5) Panstarrs
Jewitt David, Weaver Harold, Mutchler Max, Li Jing, Agarwal Jessica, Larson Stephen

14:20–14:30: EPSC2018-1084
Asteroid Phase Curves Seen by Pan-STARRS 1
Bannister Michele, Fitzsimmons Alan, Young David

14:30–14:40: EPSC2018-671
Binary main-belt comet 288P
Agarwal Jessica, Jewitt David, Mutchler Max, Weaver Harold, Larson Stephen

14:40–14:50: EPSC2018-770
The NEOSHIELD-2 project: results from the spectroscopic survey of small NEOs
Fornasier Sonia, Perna Davide, Barucci Maria Antonietta, Popescu Marcel, Doressoundiram Alain, Merlin Frederic, Fulchignoni Marcello, Lantz Cateline

14:50–15:00: EPSC2018-118
Earth’s missing coorbitals
Christou Apostolos, dell’Oro Aldo, Borisov Galin, Bagnulo Stefano, Cellino Alberto

15:00–15:10: EPSC2018-1072
The case for depth-dependent thermal properties of asteroids: evidence from Earth-based observations
Drube Line, Harris Alan

15:10–15:20: EPSC2018-807
Search for possible differences in dynamical and physical properties of L4 an L5 Jupiter Trojans
Slyusarev Ivan, Glezina Daniella, Belskaya Irina

15:20–15:30: EPSC2018-1157
Retrograde 1:1 mean motion resonance: a perturbative treatment
Sidorenko Vladislav
15:30–15:40: EPSC2018-504
Unusual properties of asteroid (3200) Phaethon from polarimetric observations and modeling
Kiselev Nikolai, Afanasiev Viktor, Petrov Dmitry, Rosenbusch Vera

15:40 Coffee break

16:15–16:25: EPSC2018-91
The Brazil nut effect under reduced gravity
von Borstel Ingo, Helms Fabian, Katsuragi Hiroaki, Blum Jürgen

16:25–16:35: EPSC2018-877
Cooling rates of chondrules from diffusion profiles in relict olivine grains
Stockdale Shannon, Franchi Ian, Morgan Dan, Anand Mahesh, Grady Monica

16:35–16:55: EPSC2018-611
Multi-phase melt percolation during core formation (solicited talk)
Hesse Marc

16:55–17:05: EPSC2018-130
Magma ascent in planetesimals: control by grain size
Lichtenberg Tim, Keller Tobias, Katz Richard, Golabek Gregor, Gerya Taras

17:05–17:25: EPSC2018-108
Understanding iron meteorites and early Solar System metallic cores of asteroid parent bodies (solicited talk)
Chabot Nancy

17:25–17:35: EPSC2018-1173
A Framework for Spectral Reflectance Analysis of Carbonaceous Chondrite Meteorites (and Asteroids)
Cloutis Edward A.

17:35–17:45: EPSC2018-1043
Meteorite 4.5Gyr halite crystals likely to originate from Comets
Wallis Max, Wisckramasinghe Chandra

17:45–17:55: EPSC2018-259
A Comprehensive Model for Activation of Main Belt Comets
Haghighipour Nader, Maindl Thomas

END OF TUESDAY ORAL PROGRAMME SB4
ORAL PROGRAMME SB4 CONTINUES ON FRIDAY

SB17/AB3 Organic Matter in Space (co-organized)

Convener: Vassilissa Vinogradoff
Co-conveners: Gregoire Danger; Laurent Remusat
Lecture Room: Uranus

14:00–14:20: EPSC2018-1102
Organic molecules in protoplanetary disks
Favre Cécile, Fedele Davide, Semenov Dmitry, Codella Claudio, Ceccarelli Cecilia, Bergin Edwin, Parfenov Sergey, Hersant Franck

14:20–14:40: EPSC2018-657
Solid state matter and chemical evolution in space. Insights from quantum chemical calculations (solicited talk)
Rimola Albert

14:40–15:00: EPSC2018-387
Profiling meteorite soluble organic matter using (ultra)high resolution organic spectroscopy (solicited talk)
Schmitt-Kopplin Philippe, Ruf Alexander, Hertkorn Norbert, Harir Mourad, Kanawati Basem, Lucia Marianna, Quirico Eric, Greshake Ansgar, Gabelica Zelimir

15:00–15:15: EPSC2018-39
Abundance, Enantiomeric, and $^{13}$C Isotope Analyses of Meteoritic Aldehydes and Ketones
Aponte Jose, Elsila Jamie, Dworkin Jason

Flynn George, Wirick Sue, Keller Lindsay

15:30–15:45: EPSC2018-1170
Liquid hydrocarbons at the surface of Titan: bubbling or not bubbling?
Cordier Daniel, Liger-Belair Gérard, García-Sanchez Fernando

15:45 Coffee break

16:15–16:30: EPSC2018-438
UV luminescence characterisation of organics in Mars-analogue substrates
Laurent Boris, Cousins Claire Rachel, Gunn Matt, Cross Rachel, Huntly Carys, Allender Elyse

16:30–16:45: EPSC2018-435
D/H and microstructure of irradiated organic dust analogs
Riebe My, Nuevo Michel, Stroud Rhonda, Nittler Larry, Sandford Scott, Alexander Conel, Wang Jianhua

16:45–17:00: EPSC2018-1047
Aqueous alteration of fluoranthene ($C_{16}H_{10}$) in asteroids and meteorites
Giese Claudia-Corina, ten Kate Inge Loes, King Helen E., Plümper Oliver, Tielens Xander
11:50–12:05: EPSC2018-774
Immersive Visualization of Planetary Reconstructions for Geological Interpretation
Oertner Thomas, Haaser Georg, Steinlechner Harald, Barnes Rob, Gupta Sanjeev, Traxler Chris, Paar Gerhard

Interactive Solarsystem for High-Resolution Planetary Data Exploration
Bernstein Andreas-Christoph, Schneegans Simon, Flatken Markus, Gerndt Andreas, Utzig Sebastian

12:20–12:25: Conclusion

END OF ORAL PROGRAMME OEP5

Amateur Astronomy

AM1 Professional-Amateur collaborations in small bodies, terrestrial, giant, exo planets studies and Juno Ground-Based Support

Convener: Marc Delcroix
Co-conveners: Harri Haukka; Ricardo Hueso: Padma Yanamandra-Fisher; John Rogers; Leigh Fletcher
Lecture Room: Mars

16:15–17:45
Chairperson: Marc Delcroix

Juno pro-am collaborations

16:15–16:25: EPSC2018-205
Characterization of Jupiter’s Atmosphere by Juno and a Network of Earth-Based Observations
Orton Glenn, Momary Thomas, Tabataba-Vakili Fachreddin, Hansen Candice, Bolton Scott, Eichstaedt Gerald, Rogers John

16:25–16:35: EPSC2018-586
On the Value of JunoCam’s Marble Movie Images
Eichstaedt Gerald, Hansen-Koharcheck Candice

16:35–16:45: EPSC2018-562
The new South Tropical Disturbance and its interaction with the Great Red Spot

16:45–16:55: EPSC2018-233
First light of the affordable adaptive optic system “CIAO” at Pic du Midi Observatory
Dauvergne Jean-Luc, Dovillaire Guillaume, Colas François, Delcroix Marc, Lecacheux Jean, Rondeau Christophe, Juval Rémy

OEP5 Immersive visualization of planetary data

Convener: Andreas-Christoph Bernstein
Co-conveners: Andreas Gerndt; Simon Schneegans
Lecture Room: Uranus

10:45–12:25
Chairperson: Andreas Gerndt

10:45–10:50: Introduction

10:50–11:05: EPSC2018-94
Multiple ways to visualize planetary image data
Eigler Stephan, Adeli Solmaz, Gwinner Klaus, Hütting Christian, Jaumann Ralf, Kersten Elke, Köhler Ulrich, Matz Klaus-Dieter, Andrea Naß, Oberst Jürgen, Pieth Susanne, Preusker Frank, Roatsch Thomas, Tirsch Daniela, Wählisch Marita, Weiland Marianna, Willner Konrad

11:05–11:20: EPSC2018-1206
Using techniques from the visual effects industry to process raw JunoCam imagery for 3D presentation
Brealey Matt

11:20–11:35: EPSC2018-544
Interactive Planetary Visualization and Analysis with NASA’s Solar System Treks Portals
Day Brian, Law Emily

11:35–11:50: EPSC2018-1136
Immersive Visualization in Planetarium Domes
Voss Björn, Horn Tim Florian

END OF ORAL PROGRAMME SB17/AB3

Outreach, Education and Policy

European Planetary Science Congress 2018
Solar system collaborations

16:55–17:05: EPSC2018-607
Amateur studies of Venus in the near IR and UV
Arditti David

17:05–17:15: EPSC2018-523
Recent high-cadence photometry and outburst characteristics of
Comet 29P/Schwassmann-Wachmann 1
Miles Richard and the Comet 29P Observing Campaign

17:15–17:25: EPSC2018-1249
Participative astronomy network experience in observing asteroidal occultation in Algeria
Baba Aissa Djounai

17:25–17:35: EPSC2018-1193
Repeat Illumination Observations of the Moon
Cook Anthony

Exo-planets collaborations

17:35–17:45: EPSC2018-66
Use of CMOS cameras in exoplanet transit photometry
Murawski Gabriel

END OF ORAL PROGRAMME AM1
Lunar Science and Exploration

LSE1/TP15 Late Accretion of the Moon, Earth, and other Terrestrial Planets (co-organized)

Convener: Gregory Michael
Co-conveners: Elena Martellato; Sabrina Schwinger; Emily Worsham
Chairpersons: G. Michael, E. Martellato, S. Schwinger, E. Worsham
Attendance time: Tuesday, 18:15–20:00

P1: EPSC2018-1000
Forming a Lunar Dichotomy by Giant Impact Melting
Schwinger Sabrina, Zhu MengHua

P3: EPSC2018-372
Volatile outgassing and chemical speciation of the C-O-H system in the Earth’s Magma Ocean
Ortenzi Gianluigi, Sohl Frank, Noack Lena

P4: EPSC2018-291
Early evolution of Venus and Earth constrained by the reproduction of measured Ar, Ne isotope and K/U elemental ratios

P5: EPSC2018-305
Escape and fractionation of elements from planetary embryos
Benedikt Markus, Scherf Manuel, Lammer Helmut, Marcq Emmanuel, Odert Petra, Leitzinger Martin

P6: EPSC2018-351
The Pb-Pb chronology of impact melt rock 14310 and new crater size-frequency distribution measurements of the Apollo 14 landing site
Borisov Danil, Hiesinger Harald, Haber Thomas, Scherer Erik, Iqbal Wajiha, van der Bogert Carolyn

END OF POSTER PROGRAMME LSE1/TP15

LSE5 Lunar Volatiles

Convener: Kathleen Mandt
Co-conveners: Olivier Mousis; Wes Patterson; Elliot Setton-Nash
Chairpersons: Wes Patterson & Olivier Mousis
Attendance time: Tuesday, 18:15–20:00

P7: EPSC2018-331
Enhancements in the lunar exosphere seen in LACE data
Kilren Rosemary, Park Jaekyun, Tucker Orenthal, Williams David, Kim Sang-Joon

P8: EPSC2018-1071
Lunar Science, Volatiles Prospecting and In-Situ Resource Utilisation: Synergistic Science and Exploration
Barber Simeon, Abernethy Feargus, Anand Mahesh, Levin-Prabhu Vibha, Lim Sungwoo, Morse Andrew, Mortimer James, Pitcher Craig, Sargeant Hannah, Sheridan Simon, Verchovsky Sasha, Wright Ian

END OF POSTER PROGRAMME LSE5

LSE6/MTI10 Science and Innovation for the Moon Village and beyond (co-organized)

Convener: Bernard Foing
Co-conveners: Chrysa Avdellidou; Germaine Van der Sanden; Christiane Heinicke
Attendance time: Tuesday, 18:15–20:00

P9: EPSC2018-29
“Digital Moon”: information system for distribution, visualization and analysis of lunar data
Karachevtseva Irina, Garov Andrey, Zubarev Anatoly, Matveev Evgeny, Kozlova Natalia

P10: EPSC2018-62
SpectroLab: a planetary spectroscopic test bench in a Cube
Clavé Elise, Foing Bernard, Dubois Louis, van der Sanden Germaine

P11: EPSC2018-660
EuroMoonMars 2018 Workshop: Lunar Analogue simulations
Clavé Elise, Foing Bernard, Dubois Louis, vd Sanden Germaine, Krainski Mateusz, Grulich Maria, Sitnikova Anna, Cinelli Illaria, Zaklinsky Alexander, Rodrigues Jocelino, Michalik Daniel

P12: EPSC2018-673
Ground Control Center during Analogue simulation for EuroMoonMars 2018 Workshop
Clavé Elise, Foing Bernard, Dubois Louis, vd Sanden Germaine

P13: EPSC2018-1126
Near surface environment specifications for Lunar South Pole exploration sites
Cipriani Fabrice, Kuznetsov Ilya, Foing Bernard

P14: EPSC2018-1143
FDOA-based method to enhance TOF method for Position Determination of Lunar Exploration Rovers
Garcia de Quiros Nieto Francisco Javier, Radice Gianmarco, Carrasco José A.

P15: EPSC2018-913
Conceptual design and development of Lunar Mobile Habitat for exploration of Moon
Neduncheran Adhithiyan, Guven Ugur, Chandra Rohan, Notnani Dhanganjay, Dhawan Mehul Paul, Nangalia Utsav

END OF POSTER PROGRAMME LSE6/MTI10
Outer Planet Systems

OPS2 Cassini’s Legacy: One Year Later

Convener: Scott Edgington
Co-conveners: Sushil K. Atreya; Athena Coustenis; Norbert Krupp; Linda Spilker
Attendance time: Tuesday, 18:15–20:00

P16: EPSC2018-226
Saturn’s ionosphere: Electron density altitude profiles and ring shadowing effects from the Cassini Grand Finale.

P17: EPSC2018-624
Saturn’s equatorial ionosphere: dominance of heavy ions and model comparisons with Cassini Grand Finale data

P18: EPSC2018-838
Saturn’s Atmospheric Photochemistry: Chemistry and Haze in Ring-Shadowed Atmosphere and within the Hexagon
Edgington Scott, Atreya Sushl, Wilson Eric, Baines Kevin, West Robert, Bjoraker Gordon, Fletcher Leigh, Momary Thomas

P19: EPSC2018-488
What is the plasma density in the Enceladus plume?
Crary Frank

P20: EPSC2018-138
Equatorial magnetic field oscillations observed over the Cassini mission
Andrews David, Cowley Stanley, Hadid Lina, Hunt Greg, Morooka Michiko, Provan Gabby, Wahlund Jan-Erik

P21: EPSC2018-1125
Survey of Saturn’s magnetosheath and its boundaries throughout the Cassini mission
Jackman Caitriona, Thomsen Michelle, Sergis Nick, Dougherty Michele

P22: EPSC2018-553
Titan Trek and IcyMoons Trek: Two New Online NASA Visualization and Analysis Portals for Saturn’s Moons
Day Brian, Law Emily

END OF POSTER PROGRAMME OPS2

Magnetospheres and Space Physics

MSP1/MD9 Planetary space weather (co-organized)

Convener: Nicolas André
Co-conveners: Manuel Grande; Jean Lilensten; Christina Plainaki; Maria Kotelnikova; Sergey Starchenko
Chairperson: Nicolas Andre
Attendance time: Tuesday, 18:15–20:00

P23: EPSC2018-750
Space Weather in the Outer Solar System
Plainaki Christina

P24: EPSC2018-174
Several questions on the structure of the cometary induced magnetospheres
Israelevich Peter

P25: EPSC2018-47
DeTeCt3.1.: A software tool to detect impacts of small objects in video observations of Jupiter obtained by amateur astronomers
Juaristi Jon, Delcroix Marc, Hueso Ricardo, Sanchez-Lavega Agustin, Andre Nicolas

P26: EPSC2018-985
Solar Windsocks: Estimating Solar Wind Speeds from Comet Ion Tail Images
Jones Geraint, Bentley Bob, Ramanjooloo Yudish

P27: EPSC2018-1035
Tailcatcher: A software tool for the finding of potential cometary tail crossings
Jones Geraint

P28: EPSC2018-1077
The Spatial Distribution of Lunar Impact Flashes
Sweeney Calum, Thorpe David, Cook Anthony

P29: EPSC2018-459
A Virtual Observatory (VO) Event model for the optical detection of meteors and transient luminous events
Marmo Chiara, Garnung Matthieu, Le Sidaner Pierre, Ceconi Baptiste, Celestin Sebastien, Koschny Detlef

P30: EPSC2018-90
The PSWS Space Weather VOEvent alerts service of the CDPP
Gangloff Michel, André Nicolas, Génot Vincent, Ceconi Baptiste, Le Sidaner Pierre, Goutenoir Antoine, Bouchemiti Myriam, Budnik Elena

END OF POSTER PROGRAMME MSP1/MD9
MSP2/MD8 Global modelling and remote sensing of planetary magnetospheric dynamics (co-organized)

Convener: Graziella Branduardi-Raymont
Co-conveners: Caitriona Jackman; Norbert Krupp
Chairperson: G. Branduardi-Raymont
Attendance time: Tuesday, 18:15–20:00

P31: EPSC2018-100
(A)uroral (K)ilometric (R)adiation as a Self-Organized System
Marek Michał, Schreiber Roman

P32: EPSC2018-318
Evaluating Single Spacecraft Observations of Planetary Magnetotails with a Simple Monte Carlo Simulation
Smith Andy, Jackman Caitriona, Frohmaier Christopher, Coxon John, Slavin James, Fear Robert

P33: EPSC2018-513
Modeling of kinetic wave modes for various magnetospheric conditions at Jupiter
Janser Sascha, Saur Joachim

P34: EPSC2018-4
Parametrization of Low Frequency Internal-Gravity Waves in the Shear Flow Driven Ionosphere
Chargazia Khatura, Kharhiladze Oleg, Zimbardo Gaetano, Kvaratskhelia Diana, Jakhvishvili Nodar, Gomiashvili Ketevan

END OF POSTER PROGRAMME MSP2/MD8

Modelling and Database

MD2/MTI4/LFI4 Machine Learning for Planetary Science in times of increasing data volume and complexity (co-organized)

Convener: Mario D'Amore
Co-conveners: Stéphane Erard; Jörn Helbert
Attendance time: Tuesday, 18:15–20:00

P35: EPSC2018-706
Attempting rapid exoplanet's classification with neural networks
Padovan Sebastiano, Baumeister Philipp, Doris Breuer, Sohl Frank, Spohn Tilman, Tosi Nicola

P36: EPSC2018-1068
Machine Learning Classification of Simulated Mars Observations
Erwin Justin, Trompet Loïc, Vandaele Ann C, Robert Séverine, Thomas Ian, Daerden Frank, Neary Lori, Viscardy Sébastien

END OF POSTER PROGRAMME MD2/MTI4/LFI4

Missions, Techniques and Industry

MTI3 Advances in Planetary Mapping, Geographic Information Techniques, and Data Mining

Convener: Anthony Cook
Co-conveners: Konrad Willner
Chairperson: Anthony Cook
Attendance time: Tuesday, 18:15–20:00

P37: EPSC2018-996
Photoscan DEMs from Apollo 15 Hasselblad Photographs
Manheim Madeleine, Wagner Robert, Klem Susan, Robinson Mark

P39: EPSC2018-311
Analysis and global mapping of statistical parameters of Mercury relief characteristics
Zharkova Anastasia, Kokhanov Alexander, Kolenkina Maria

P40: EPSC2018-37
The Web-based Interactive Mars Analysis and Research System for the iMars project

P41: EPSC2018-942
ACRI-ST: From data to science
Bernard-Salas Jeronimo, Cox Nick, Vergely Jean-Luc, Ferron Stephane, Blanot Laurent, Delaye Lauriane, Bruniquel Veronique, Hembise Fanton d'Andon Odile

P42: EPSC2018-407
Datasets Fusion Techniques as the tool for analyzing the crustal properties of terrestrial and icy bodies to address their formation and geologic evolution in the Solar System
D'Incecco Piero, Rivera-Valentin Edgard

END OF POSTER PROGRAMME MTI3

MTI7 Planetary in situ measurements

Convener: Axel Hagermann
Co-conveners: Günter Kargl; Erika Kaufmann
Chairperson: Kaufmann
Attendance time: Tuesday, 18:15–20:00

P43: EPSC2018-309
In situ measurements of the xenon isotopes at Uranus and Neptune: a powerful tool to decipher the origin of ice giant building blocks
Mousis Olivier, Ronnet Thomas, Mandt Kathleen E., Lunine Jonathan I., Marty Bernard, Atkinson David H., Hofstadter Mark D.
P44: EPSC2018-154
Scientific rationale for in situ exploration of the ice giants
Mousis Olivier, Atkinson David, Cavalié Thibault, Fletcher Leigh, Amato Michael, Aslam Shahid, Ferri Francesca, Renard Jean-Baptiste, Spilker Thomas, Venkatapathy Ethiraj, Wurz Peter, Aplin Karen, Coustenis Athena, Deleuil Magali, Dobrijevic Michel, Fouchet Thierry, Guillot Tristan, Hartogh Paul, Hewagama Tilak, Hofstadter Mark

P45: EPSC2018-631
Status of MEDA PS and MEDA HS Pressure and Relative Humidity Devices for Mars 2020 Rover
Hieta Maria, Genzer Maria, Nikkanen Timo, Haukka Harri, Polkko Jouni, Meskanen Matias, Harri Ari-Matti, Rodríguez-Manfredi Jose A

P46: EPSC2018-876
Correction of Galileos Energetic Particle Detector, Composition Measurement System
Lee-Payne Zoe, Grande Manuel, Kollmann Peter, Krupp Norbert

P47: EPSC2018-885
Laboratory studies of tholins, analogues of Titan aerosols, with the LAB-CosmOrbitrap
Selliez Laura, Cherville Barnabé, Briois Christelle, Carrasco Nathalie, Maillard Julien, Gautier Thomas, Thirkell Laurent, Gaubicher Bertrand, Lebreton Jean-Pierre

P48: EPSC2018-982
Plenoptic cameras for in-situ micro imaging
Lingenauber Martin, Krutz Ulrike, Fröhlich Florian, Strobl Klaus H.

P49: EPSC2018-1027
Simple modelling of Plasma Parameters to Assist the Analysis of LIBS Spectra for Planetary Exploration
Hansen Peder, Vogt David S., Schröder Susanne, Rammelkamp Kristin, Kubitza Simon, Frohmann Sven, Hübers Heinz-Wilhelm

P50: EPSC2018-1174
Colorimetric analysis to help identification of drilled rock powders on Mars: the CaliPhoto method
Foucher Frédéric and the the CaliPhoto team

P51: EPSC2018-1219
Investigation of lunar dusty exosphere with future Russian lunar missions: Development of the Instrument & Simulation Control
Zakharov Alexander, Dolnikov Gennady, Kuznetsov Ilya, Lyash Andrey, Shashkova Inna, Popel Sergei

END OF POSTER PROGRAMME MT17

Astrobiology

AB1 Astrobiology

Convener: John Robert Brucato
Co-convener: Felipe Gómez
Attendance time: Tuesday, 18:15–20:00

P52: EPSC2018-30
Aquaeus alteration and putative microbial mediation in NIPR L chondrites
Bérczi Szaniszló, Polgári Márta, Gyollai Ilidó

P53: EPSC2018-392
In-situ detection of biosignatures from 1.9 Ga Gunflint chert with LMS
Lukmanov Rustam, Tulej Marek, Wiesendanger Reto, Riedo Andreas

P54: EPSC2018-886
Effects of low and high energy proton radiation on the preservation of biomolecules as followed by their immuno-identification behavior
Blanco Lopez Yolanda, Víquez-Moreiras Daniel, Moreno-Paz Mercedes, Le Postollec Aurélie, Incerti Sébastien, Dobrijevic Michael, Rodríguez-Manfredi José Antonio, Parro Víctor

P55: EPSC2018-926
Appraisal of lithologies and biosignatures using the ExoMars 2020 CLUPI instrument: blind tests using simulated mission observational conditions
Hickman-Lewis Keyron, Pellielier Steven, Foucher Frédéric, Messori Fabio, Westall Frances

P56: EPSC2018-963
Dallol: A unique study of life under multiple co-occurring physiochemical extremes
Rennie Vincent, Warren Clare J., Cavallazzi Barbara, Olsson-Francis Karen

P57: EPSC2018-2
Interaction of thymine and uracil with nickel and cadmium hexacyanoferrates (II) and its implication in chemical evolution and the origin of life
Whyte Rayanna, Tewari Brij

P58: EPSC2018-903
Diverse Stratosphere Circulation in tidally locked Exo-Earths
Carone Ludmila, Keppens Rony, Decin Leen, Henning Thomas

P59: EPSC2018-928
Photoprocessing of formamide ice: route towards prebiotic chemistry in space
Corazzi Maria Angela, Brucato John Robert, Poggiali Giovanni

END OF POSTER PROGRAMME AB1
Small Bodies (comets, KBOs, rings, asteroids, meteorites, dust)

SB4 Asteroids and parent bodies of meteorites: Observations, experiments, models

Convener: Wladimir Neumann
Co-conveners: Marco Ferrari; Sabrina Schwinger; Eleonora Ammannito; Ottaviano Ruesch
Chairpersons: Wladimir Neumann, Sabrina Schwinger, Marco Ferrari
Attendance time: Tuesday, 18:15–20:00

P60: EPSC2018-81
Ideal method for asteroid compositional analysis - mid-infrared spectral work with DRIFTs for HERA mission
Skultéti Ágnes, Kereszturi Ákos

P61: EPSC2018-315
Future orbital evolution of comets discovered in 2016-2018
Kovalenko Nataliya, Kleshchonok Valeriy

P62: EPSC2018-354
Effect of surface roughness on the reflectance spectra of metallic meteorites
Potin Sandra, Beck Pierre, Libourel Guy

P63: EPSC2018-396
Chaotic transport of Main Belt asteroids in Martian resonances
Christou Apostolos, Dermott Stanley, Li Dan

P64: EPSC2018-481
Chondrules alteration study of NWA2086 CV3 meteorite by using μ-IR and SEM/EDS combined analysis and implications for asteroid parent body
Dirri Fabrizio, Ferrari Marco, Palomba Ernesto, Stefani Stefania, Longobardo Andrea, Rotundi Alessandra

P65: EPSC2018-626
Investigation of Mobility-related Surface Features on Asteroids and their Relation to Volatiles
Parekh Rutu

P66: EPSC2018-899
Mesosiderites and HEDs characterized combining by μ-IR and SEM/EDS combined analysis in relation to infrared spectra of Vesta-like asteroids
Ferrari Marco, Dirri Fabrizio, Palomba Ernesto, Stefani Stefania, Rotundi Alessandra

P67: EPSC2018-1030
The second joint Italian - Iranian expedition to Dasht-e Lut for meteorite recovery
Ferrari Marco, Moggi Cecchi Vanni, Pratesi Giovanni, Di Martino Mario, Giuli Gabriele, Nemati Majid, De Sanctis Maria Cristina

END OF POSTER PROGRAMME SB4

SB13/MTI8 Sample return missions: lessons learned and future perspectives (co-organized)

Convener: Andrea Longobardo
Co-conveners: Fabrizio Dirri; Maurizio Pajola; Sarah-Jane Gill
Chairperson: Andrea Longobardo
Attendance time: Tuesday, 18:15–20:00

P68: EPSC2018-454
An analysis of the components of the RITD and evaluating alternatives for each component
Marian Christian, Koryanov Vsevolod, Toporkov Alexey, d’Albert Hugo

P69: EPSC2018-614
Analysis of Results of Scaled Parachute High Altitude Deployment Test
Lu Yuanyuan

P70: EPSC2018-1182
Mars sample return processing: X-Ray Computed Tomography of the Mars 2020 cache
Welzenbach Linda, Fries Marc, Grady Monica, Greenwood Richard, McCubbin Francis, Smith Caroline, Steele Andrew, Zeigler Ryan

P71: EPSC2018-10
Dry Ice Freezing-Sublimation Energy Conversion for Space Stations, the Moon, and with Particular Reference to Mars
Arias Francisco J

END OF POSTER PROGRAMME SB13/MTI8

SB14 Small Bodies as Granular Systems

Convener: Daniel Hestroffer
Co-conveners: Nicolas Taberlet; Paolo Tanga
Chairperson: Hestroffer
Attendance time: Tuesday, 18:15–20:00

P72: EPSC2018-797
Studying surface morphologies of comet 67P/C-G using discrete element simulations
Kappel David, Otto Katharina, Oklay Nilda, Michalik Tanja, Haack David, Kuehrt Ekkehard, Tirsch Daniela, Motta Stefano, Groussin Olivier

P73: EPSC2018-828
Fine-Grained Regolith on the Young Asteroids (1270) Datura and (5026) Martes

END OF POSTER PROGRAMME SB14
SB16 Observing and modelling meteors in planetary atmospheres

Convener: Maria Gritsevich  
Co-conveners: Jürgen Oberst; Apostolos Christou; Elizabeth Silber; Josep Maria Trigo-Rodriguez  
Chairperson: Manuel Moreno-Ibáñez

Attendance time: Tuesday, 18:15–20:00

P74: EPSC2018-585  
Shock waves generated by meteoroids impacting the Earth’s atmosphere: An up-to-date state of knowledge in the field  
Silber Elizabeth, Gritsevich Maria, Boslough Mark, Hocking Wayne, Whitaker Rod

P75: EPSC2018-554  
Southern sky meteor showers - AMOS data  
Toth Juraj, Korns Leonard, Matlovic Pavol, Rudawska Regina, Hajduková Maria, Zigo Pavol, Vilagi Jozef

P76: EPSC2018-1164  
Validation of the open-source software Meteor Toolkit  
Dmitriev Vasily, Lupovka Valery, Gritsevich Maria

P77: EPSC2018-582  
The production of nitric oxide by centimetre-sized meteoroids in the upper atmosphere  
Silber Elizabeth, Gritsevich Maria, Silber Reynold, Butka Peter

P78: EPSC2018-518  
Numerical modelling of meteoric dust transport in Earth atmosphere  
Vinnikov Vladimir, Gritsevich Maria

P79: EPSC2018-88  
The fireball of 21/09/2017: a study of eyewitness reports  
Elgner Stephan, Hauenschild Marius, Flohrer Joachim, Heinlein Dieter, Strunk Jörg, Oberst Jürgen, Margonis Anastasios

P80: EPSC2018-728  
Analysis data of atmospheric trajectory 8916 radio meteoroids registered in HisAO  
Narzive Mirhusen, Jopek Tadeusz, Khujanazarov Habibjon

P81: EPSC2018-1154  
Observations of the 3200 Phaethon and Geminid meteor shower during the epoch of close approach with the Earth  
Kartashova Anna, Ivanova Oleksandra, Ryabova Galina, Husarik Marek

P82: EPSC2018-1062  
A spectroscopy pipeline for the CILBO meteor detection system  
Rudawska Regina, Zender Joe, Koschny Detlef, Smit Hans, Löhle Stefan, Zander Fabian, Eberhart Martin, Meindl Arne

END OF POSTER PROGRAMME SB16

SB17/AB3 Organic Matter in Space  
(co-organized)

Convener: Vassilissa Vinogradoff  
Co-conveners: Gregoire Danger; Laurent Remusat  
Chairpersons: Vassilissa Vinogradoff, Laurent Remusat, Gregoire Danger

Attendance time: Tuesday, 18:15–20:00

P83: EPSC2018-67  
From Astrochemistry to Prebiotic Chemistry: the Organic Matter Evolution  
d'Hendecourt Louis, Pascal Robert, Danger Grégoire

P84: EPSC2018-1241  
Development and realization of a spatialized micro LC for the analysis of biomarkers  
Ribette Thomas, Geoffroy Claude, Poinot Pauline

P85: EPSC2018-663  
UV induced methane and volatile organic carbon emission from the Murchison meteorite  
Boosman Arjen, ten Kate Inge Loes, Mason Paul, Polerecky Lubos, Materić Dušan, Holzinger Rupert, Röckmann Thomas

P86: EPSC2018-967  
Study of organic compounds present in the NorthWest Africa 6148 Nakhlite by means of Raman spectroscopy  
Madariaga Juan Manuel, Torre-Fernandez Imanol, Ruiz-Galende Patricia, Aramendia Julene, Gomez-Nubla Leticia, Castro Kepa, Fdez-Ortiz de Vallejuelo Silvia, Arana Gorka

P87: EPSC2018-109  
The search for polyynes in electron irradiated ices of astrochemical relevance  
Kanuchova Zuzana, Ioppolo Sergio, Jones Nykola, Hoffmann Soren, Strazzulla Giovanni, Mason Nigel

P88: EPSC2018-634  
Evolution of Organic Molecules in Pre-Solar Ice  
Gudipati Murthy, Henderson Bryana, Radhakrishnan Soumya, Sander Wolfram, Lignell Antti

P89: EPSC2018-997  
Photocatalytic properties of minerals and their role in prebiotic chemistry  
Kopacz Nina, ten Kate Inge Loes

P90: EPSC2018-1086  
Interstellar Fullerenes  
Cox Nick, Foing Bernard

END OF POSTER PROGRAMME SB17/AB3
SB19/OPS12/EXO6 Planetary Rings (co-organized)

Convener: Holger Hoffmann
Co-conveners: Jürgen Schmidt; Frank Spahn
Chairperson: Frank Spahn
Attendance time: Tuesday, 18:15–20:00

P91: EPSC2018-190
Modeling the density profile of the outer A ring with an axisymmetric diffusion model
Grätz Fabio, Seiler Michael, Seiß Martin, Spahn Frank

P92: EPSC2018-744
Analysis of Santos-Dumont’s asymmetric propeller gaps
Hoffmann Holger, Seiler Michael, Seiß Martin, Spahn Frank

P93: EPSC2018-1266
Behaviour of a stochastic parametric oscillator with application to dust particles originating in the inner Saturnian rings
Schirdewahn Daniel, Spahn Frank

END OF POSTER PROGRAMME SB19/OPS12/EXO6

Outreach, Education and Policy

OEP3 Europlanet Public Engagement Prize and Funding Scheme Showcase

Convener: Eleni Chatzichristou
Chairperson: Régis Courtin
Attendance time: Tuesday, 18:15–20:00

P94: EPSC2018-520
The EUROPLANET Meteorites Virtual Microscope Collection
Anand Mahesh, Tindle Andrew, Kelley Simon

P95: EPSC2018-1285
Rosetta’s Comet Touchdown educational kit
Roos Maarten, Bauer Markus, Lang Ágota, Rodrigues Filomena

P96: EPSC2018-150
The Planeterrella
Lilensten Jean

P97: EPSC2018-1160
From VMR to ReMY: Game concept awarded by Europlanet becomes Remote Mars Yard
Józefowicz Mateusz, Meszyński Sebastian, Sokolov Oleksandr

P98: EPSC2018-869
3D Tactile Moon
Ortiz-Gil Amelia

P99: EPSC2018-816
AMADEE-18 Junior Explorers Program
Groemer Gernot, Haider Olivia, Prock Silvia

P100: EPSC2018-170
Planetary Maps Designed for Children
Hargitai Henrik

P101: EPSC2018-60
Europlanet prize 2012 - still committed to outreach
Naze Yael

P102: EPSC2018-1222
Sneaking science education into addictive games that can be played by people with diverse needs.
Gay Pamela, Lehan Cory

P103: EPSC2018-1245
Spaceguard UK - The First Two Decades
Tate Jonathan

P104: EPSC2018-254
Planets in a Room: a DIY, low-cost educational kit
Giacomini Livia, Aloisi Francesco, De Angelis Ilaria, Capretti Stefano

P105: EPSC2018-78
OpenPlanetaryMap: Building the first Open Planetary Mapping and Social platform for researchers, educators, storytellers, and the general public
Manaud Nicolas, Nass Andrea, van Gasselt Stephan, Lewando Myles, Pio Rossi Angelo, Hare Trent, Carter John, Hargitai Henrik

P106: EPSC2018-1251
Planets in your Hand
Kefala Kyriaki, Gazeas Kosmas and the Planets in your Hand Team

P107: EPSC2018-1004
Connacht Schools Planetary Radio Telescope Network
Golden Aaron, Campbell Paula, De Hora Paul, Grogan Sinead, Hession Anne, Mulvey Patricia, O’Gorman Sarah, Ô hÉanaigh Mardhc, Spellacy Neil, Stephens James, Toner John

P108: EPSC2018-1202
Don’t Be Afraid of Gaps
Graps Amara

END OF POSTER PROGRAMME OEP3

OEP5 Immersive visualization of planetary data

Convener: Andreas-Christoph Bernstein
Co-conveners: Andreas Gerndt; Simon Schneegans
Chairperson: Andreas Gerndt
Attendance time: Tuesday, 18:15–20:00

P109: EPSC2018-286
BepiVR: Virtual Reality for BepiColombo outreach
Politi Romolo, Simioni Emanuele, Cremonese Gabriele, Galluzzi Valentina, Magnifico Carmelo, Mangano Valeria, De Marchi Fabrizio, Re Cristina, Romano Domenico

END OF POSTER PROGRAMME OEP5
**Amateur Astronomy**

AM1 Professional-Amateur collaborations in small bodies, terrestrial, giant, exo planets studies and Juno Ground-Based Support

Convener: Marc Delcroix  
Co-conveners: Harri Haukka; Ricardo Hueso; Padma Yanamandra-Fisher; John Rogers; Leigh Fletcher  
Chairperson: Marc Delcroix  
Attendance time: Tuesday, 18:15–20:00

**Planets collaborations**

P110: EPSC2018-46  
Science from PVOL2 (The Planetary Virtual Observatory and Laboratory): A database of amateur observations of Solar system planets integrated in VESPA  
Hueso Ricardo, Juaristi Jon, Legarreta Jon, Sánchez-Lavega Agustin, Erard Stephane, Cecconi Baptiste, Le Sidanier Pierre

P111: EPSC2018-117  
Changes on Mars 2003 - 2018  
Gähkren Bernd

P112: EPSC2018-270  
Jupiter’s banded pattern changes in the 0.89μm band  
Kardasis Emmanouil, Takoudi Alexia

P113: EPSC2018-1258  
Amateurs' contributions to Saturn study during and after the Cassini era  
Delcroix Marc, Fischer Georg, Sánchez-Lavega Agustin, Hueso Ricardo

**Small bodies collaborations**

P114: EPSC2018-491  
Photometric observations of asteroids - in support of the Gaia Mission  
Kluwak Tomasz

P115: EPSC2018-632  
The COBS comet database: Structure and content  
Zakrajšek Jure, Mikuž Herman, Warell Johan

P116: EPSC2018-644  
The COBS comet database: Observer tools and case study  
Warell Johan, Zakrajšek Jure, Mikuž Herman

**Exo-planets collaborations**

P117: EPSC2018-128  
Exoplanet Observations in Taurus Hill Observatory - History and Current Activities  
Haukka Harri, Huntinen Veli-Pekka, Nissinen Markku, Salmi Tuomo, Aartolähti Hannu, Juutilainen Jarl, Heikkinen Esa, Vlokki Harri

P118: EPSC2018-476  
Follow-up observations of transiting exoplanets: data collection and analysis  
Kokori Anastasia, Tsiaras Angelos

**Terrestrial Planets**

**TP1 Mercury Science and future exploration**

Convener: Joe Zender  
Co-conveners: Alice Lucchetti; Hauke Hussmann; Johannes Benkhoff; Go Murakami; Joana S. Oliveira  
Chairpersons: J. Zender, J. Benkhoff  
Attendance time: Tuesday, 18:15–20:00

P119: EPSC2018-312  
Deciphering the conditions of formation of Mercury  
Ronnet Thomas, Vernazza Pierre, Mousis Olivier, Brugger Bastien

P120: EPSC2018-344  
Discovering Rembrandt basin’s subsurface and Enterprise Rupes: 3D-model based on stratigraphic mapping and structural analysis  
Semenzato Andrea, Massironi Matteo, Pozzobon Riccardo, Galluzzi Valentina, Rothery David, Ferrari Sabrina

P121: EPSC2018-451  
Mercury Science Objectives and Traceability within the BepiColombo project: Optimizing the Science Output of the next mission to Mercury  
Besse Sebastien, Benkhoff Johannes, Bentley Mark, Cornet Thomas, Moissl Richard, Munoz Claudio, Zender Joe

P122: EPSC2018-533  
Re-examination of the population, stratigraphy, and sequence of Mercurian basins: Implications for Mercury’s early impact history and comparison with the Moon  
Orgel Csilla, Fassett Caleb I., Michael Greg, van der Bogert Carolyn H., Hiesinger Harald

P123: EPSC2018-625  
Mercury observations in 2016 and 2019, during Transits and Total Eclipse  
Pérez-Ayucar Miguel, Zender Joe, Breitfelsner Michel, Castillo Manuel

P124: EPSC2018-721  
Updates on geologic mapping of Kuiper (H06) quadrangle  
Giacomini Lorenzo, Galluzzi Valentina, Carl Cristian, Massironi Matteo, Ferranti Luigi, Palumbo Pasquale

P125: EPSC2018-726  
The BepiColombo Radiation Monitor (BERM)  
Moissl Richard
P126: EPSC2018-736
V ratarrajan Indhu, D’Amore Mario, Maturilli Alessandro, Helbert Jörn, Hiesinger Harald

P127: EPSC2018-868
Morlok Andreas, Charlier Bernard, Klemme Stephan, Namur Oliver, Sohn Martin, Weber Iris, Stojic Aleksandra, Hiesinger Harald, Helbert Joern

P128: EPSC2018-908
1.3 million Scale Geological Mapping of the Derain Quadrangle, Mercury
Maliband Christopher C., Rothy David A., Balme Matthew R., Conway Susan J.

P129: EPSC2018-936
Analytical investigations of Laser-Produced Impact Melts of Basaltic Rocks
Webir Iris, Morlok Andreas, Hamann Christopher, Martin Dayl J.P., Joy Katherine H., Wogelius Roy, Stojic Aleksandra, Hiesinger Harald, Helbert Jörn

P130: EPSC2018-1092
Spectroscopy of minerals analogs of Mercury under the hermean conditions: The effect of the temperature
Bott Nicolas, Brunetto Rosario, Carli Cristian, Capaccioni Fabrizio, Doressoudiram Alain, Langevin Yves, Perna Davide, Poulet François, Serventi Giovanna, Sgavetti Maria, Borondics Ferenc, Sandt Christophe

P131: EPSC2018-1099
Unveiling Mercury surface composition: results from MESSENGER and future outlooks from the SIMBIO-SYS Visible and Infrared Hyperspectral Imager (VIHI)
Zambon Francesca, Filacchione Gianrico, Capaccioni Fabrizio, Carli Cristian, Capria Maria Teresa, Cremonese Gabriele

P132: EPSC2018-1104
Preliminary color map of the Borealis (H-01) quadrangle of Mercury
Nguyen Ngoc, Bott Nicolas, Doressoudiram Alain

P133: EPSC2018-1129
SERENA particle package: the link between the environment and Mercury ready to launch on board BepiColombo
Orsini Stefano, Milillo Anna, Livin Stefano, Lichtenegger Herbert, Barabash Stas, De Angelis Elisabetta, Kallo Kalcio, Wurz Peter, Olivier Angelo, Planiangi Christina, Aronica Alessandro, Lazzarotto Francesco, Rispoli Rosanna and the SERENATeam

P134: EPSC2018-1139
Constraining the interior structure of Mercury by geodesy data
Deproost Marie-Hélène, Rivoldini Attilio, Van Hoolst Tim

P135: EPSC2018-1186
Bedrock layering revealed by hollows on Mercury
Galluzzi Valentina, Giacomin Lorenza, Lucchetti Alice, Pajola Maurizio, Palumbo Pasquale, Cremonese Gabriele

P136: EPSC2018-1209
Time-varying magnetic fields of Mercury
Wardinski Ingo, Langlais Benoit, Thebault Erwan

END OF POSTER PROGRAMME TP1

TP2 Mars Interior and Surface

Convener: Ernst Hauber
Co-conveners: Gino Erkeling; Solmaz Adeli; Ana-Catalina Plesa
Attendance time: Tuesday, 18:15—20:00

P137: EPSC2018-493
A numerical model of the SEIS leveling system transfer matrix and resonances: application to SEIS rotational seismology and dynamic ground interaction

P138: EPSC2018-18
Model of the Crustal Magnetic Field in the Martian Aurora Zone
Chen Chuxin

P139: EPSC2018-283
Estimates of Non-hydrostatic Stresses in the Martian Interior
Batov Alexey, Gudkova Tamara, Zharkov Vladimir

P140: EPSC2018-815
Tectonics structures in Noctis Labyrinthus area based on HRSC and CTX photogeological mapping
El Yazidi Mayssa, Pozzobon Riccardo, Debei Stefano, Massironi Matteo

P141: EPSC2018-557
Modeling the internal architecture of Mars Polar Layered Deposits by HCA method
Cianfarra Paola, Rossi Costanza, Salvini Francesco

P142: EPSC2018-294
Structural Mapping of the Inner Layered Deposits of the Crommelin Crater (Mars)
Pesce Dario, Pozzobon Riccardo, Massironi Matteo

P143: EPSC2018-1009
Geodynamic Evolution of Wrinkle Ridges and Rate of Crustal Shortening on Lunae Planum, Mars
Karagöz Oguzcan, Aksoy Murat Ersen, Erkeling Gino

P144: EPSC2018-804
Constraining the geometry and volume of Tharsis dome, Mars using impact craters central peaks
Brustel Clément, Quantin Cathy, Flahaut Jessica, Michaut Chloe, Davies Gareth R.

P145: EPSC2018-425
Volcanic system of Isidis Planitia
Zalewska Natalia, Kotlzar Jan
Tuesday – Poster programme  

- **P146: EPSC2018-1130**  
  Rootless cones as a consequence of Martian volcanism-numerical kinetic simulation  
  Zalewska Natalia, Kotlarz Jan

- **P147: EPSC2018-873**  
  Morphometric Study of Longitudinal Striations on Long Run-out Mass Movements and Ejecta Blankets on Mars: Assessment of a common formation mechanism  
  Pietrek Alexa, Hergarten Stefan, Kenkmann Thomas

- **P148: EPSC2018-245**  
  Gully activity in Sisyphi Cavi, Mars  
  Raack Jan, Conway Susan J., Philippe Meven, Heyer Thomas, Reiss Dennis, Hiesinger Harald

- **P149: EPSC2018-269**  
  Global properties of Martian Recurring Slope Lineae  
  Munaretto Giovanni, Cremonese Gabriele, Pajola Maurizio, Lazzarin Monica

- **P150: EPSC2018-882**  
  Locating new areas favourable for Recurring Slope Lineae formation in the northern hemisphere on Mars using GIS and the Mars Climate Database  
  Eriksson Andreas, Johnsson Andreas

- **P151: EPSC2018-1005**  
  Possible slow "wet" mass wasting on Mars  
  Johnsson Andreas, Conway Susan, Deiss Dennis, Hauber Ernst, Hiesinger Harald

- **P152: EPSC2018-257**  
  Aeolian Transport in Coprates Chasma, Valles Marineris  
  Boazman Sarah, Grindrod Peter, Balme Matthew, Vermeesch Pieter, Davis Joel

- **P153: EPSC2018-1**  
  Soil Evaporation on Mars by Magnetic Dipole-Dipole Interactions between Magnetic Clusters  
  Arias Francisco J

- **P154: EPSC2018-848**  
  Morphological and spectroscopic analysis of light-toned materials in southeastern Gorgonum Chaos, Mars  
  Haack David, Adeli Solmaz, Hauber Ernst, Stephan Katrin, Jaumann Ralf

- **P155: EPSC2018-486**  
  Water Content and Mineral Abundances at Gale Crater, Mars as Inferred from OMEGA and CRISM Observations  
  Liu Yang, Stachurski Federico

- **P156: EPSC2018-547**  
  Analysis of Clay Deposits in and around Ladon Basin  
  Weitz Catherine, Bishop Janice, Grant John

- **P157: EPSC2018-574**  
  Preliminary wavelengths selection for multispectral detection mode of Mars Mineral Spectrometer of China’s First Mars Exploration  
  Liu Dawei, Ren Xin, Zhang Hongbo, Zhang Zhoubin, Fu Qiang, He Zhiping, Liu Bin, Xu Rui, Chen Yuan

- **P158: EPSC2018-759**  
  Preliminary Scientific Exploration Programs for Mars Surface Composition Detection Package of China’s First Mars Exploration  
  Ren Xin, Cai Tingni, Liu Dawei, Liu Jianjun, Zhang Hongbo, Fu Qiang, Zhang Zhoubin, Xu Weimin

- **P159: EPSC2018-505**  
  Super-resolution restored HiRISE images for simulating "rover's eye" views in 3D  
  Persaud Divya M, Tao Yu, Muller Jan-Peter

- **P160: EPSC2018-1158**  
  Constraining the soil-moisture interaction at Gale Crater of Mars  
  Das Priyabrata, Basu Sarbadhikari Amit, Ghosh Jayanta, Sarkar Subham

- **P161: EPSC2018-14**  
  Seasonal Variations in SEB Components over Gale crater  
  Rangarajan Vidhya Ganesh, Ghosh Mill

- **P162: EPSC2018-1119**  
  The study of the influence of the composition and structure of Martian surface on detection the spectral features of atmospheric trace gases in IR spectra of Mars  
  Blecka Maria

- **P163: EPSC2018-51**  
  Seasonal changes of near-surface relative humidity on Mars  
  Pál Bernadett, Kereszturi Ákos, Forget Francois

- **P164: EPSC2018-1153**  
  Methane transport in the subsurface of Mars  
  Gloesener Elodie, Karatekin Özgür, Dehant Véronique

- **P165: EPSC2018-390**  
  Subsurface Investigation over Elysium Planitia, Mars using SHARAD data  
  Xiong Siting, Muller Jan-Peter

- **P166: EPSC2018-1239**  
  The subsurface water distribution in Gale crater from DAN instrument onboard NASA Curiosity rover  
  Litvak Maxim, Mitrofanov Igor, Lisov Denis, Nikiforov Sergey, Sanin Anton, Djachkova Maiia

- **P167: EPSC2018-183**  
  Subsurface Volatile Deposition on Mars  
  Patel Narissa, Hagemann Axel, Lewis Stephen, Kaufmann Erika, Balme Matt

- **P168: EPSC2018-929**  
  Investigation of regional settings for formation of Araneiform Terrain, Mars  
  Hao Jingyan, Michael Gregory, Adeli Solmaz, Jaumann Ralf

- **P169: EPSC2018-1171**  
  The Radar and Visible Stratigraphic Records of Mars’ North Polar Layered Deposits  
  Becerra Patricio, Nunes Daniel, Smith Isaac, Sori Michael, Brouet Yann, Thomas Nicolas
P170: EPSC2018-860
Comparative studies of gravitational influence of Phobos and Deimos on Mars
Neduncheran Adhithiyan, Guven Ugur, Chandra Rohan, Gireesh Lv, Mehroratna Amritansh

P172: EPSC2018-697
An analytical climate model to reproduce first order, yearly-averaged, climatology on early Mars: implications for the ancient lakes in Gale crater
Kling Alexandre, Haberle Robert

P173: EPSC2018-777
Migration of intermediately-sized particles across the Martian surface
Paton Mark, Savijärvi Hannu, Harri Ari-Matti

P174: EPSC2018-1051
Comparison of a 1D column model with temperature soundings in the Martian atmosphere
Paton Mark, Harri Ari-Matti, Savijärvi Hannu

P175: EPSC2018-648
Photochemical model of the Martian atmosphere to investigate the fate of trace gases
Witek Piotr, Wajer Pawel, Banaszkiewicz Marek, Kofman Włodek, Czechowski Leszek, Pommerol Antoine

P176: EPSC2018-811
Martian CO and wind measurements from ALMA observations
Robert Séverine, Sagawa Hideo, Vandaele Ann Carine, Aoki Shohei

P177: EPSC2018-717
Creating high-spatial resolution atmospheric profiles from the GEM-Mars GCM for the investigation of Mars
Erwin Justin. Neary Lori, Daerden Frank, Viscardy Sébastien, Vandaele Ann Carine

P178: EPSC2018-187
UV Mars emissions from CO and CO₂*: IUVS-MAVEN limb observations and model
Gérard Jean-Claude, Gkouvelis Leo, Ritter Birgit, Hubert Benoit, Jain Sonal, Schneider Nicholas, Shematovich Valery, Biskako Dmitry

P179: EPSC2018-595
O₂ distributions and related chemistry on Mars: Potential scientific targets for the future Mars terahertz sensor missions
Kuroda Takeshi, Larsson Richard, Sagawa Hideo, Aoki Shohei, Kasai Yasuko, Maezawa Hiroyuki, Kasaba Yasumasa

END OF POSTER PROGRAMME TP2

TP5 Atmospheres of terrestrial planets

Convener: Anni Määttänen
Co-conveners: Olivier Witasse; Francisco González-Galindo; Dmitrij Titov
Attendance time: Tuesday, 18:15–20:00

P170: EPSC2018-860
Comparative studies of gravitational influence of Phobos and Deimos on Mars
Neduncheran Adhithiyan, Guven Ugur, Chandra Rohan, Gireesh Lv, Mehroratna Amritansh

P180: EPSC2018-604
Non-thermal escape rates of light species from Mars using MAVEN in-situ measurements
Gacesa Marko, Lillis Robert, Deighan Justin, Elrod Meredith

P181: EPSC2018-1101
Simulations of the Mars’ upper atmosphere - influence of varying EUV flux
Amerstorfer Ute, Amerstorfer Tanja, Lichtenegger Herbert, Johnstone Colin

P182: EPSC2018-917
High-Level Science Products of SPICAM (Mars Express) and SPICAV (Venus Express)
Cox Nick, Baggio Lucio, Bertaux Jean-Loup, Blanot Laurent, Delaye Lauriane, Lacombe Gaetan, Lefèvre Franck, Marcq Emmanuel, Montmessin Franck

P183: EPSC2018-875
Study of Venus Cloud movements by comparative analysis with Terrestrial Planets
Neduncheran Adhithiyan, Lai James, Gamal Hamed, Potrivitu George Cristian, Greech Jessica, Arunan Sinnappoo

P184: EPSC2018-570
Local-time dependence of the zonal wave number spectra derived from the Venus cloud-top Temperature observed by Akatsuki LIR
Fukuhara Tetsuya, Nagata Aya, Taguchi Makoto, imamura Takeshi and the LIR Project team

P185: EPSC2018-1135
X ray spectroscopy of planetary atmospheres
Narendranath Shyama, Singham Panini, Parameswaran Sreekumar, Chandra Babu

END OF POSTER PROGRAMME TP5

TP6/SB21 Ionospheres of Unmagnetized Bodies in the Solar System: Terrestrial Planets and comets (co-organized)

Convener: Beatriz Sanchez - Cano
Co-conveners: Pierre Henri; Francisco González-Galindo; Chris Fowler; Matteo Crismani
Chairpersons: Beatriz Sanchez-Cano, Francisco González-Galindo

Attendance time: Tuesday, 18:15–20:00

P186: EPSC2018-250
The effect of solar flares on comet 67P and RPC/LAP

P187: EPSC2018-1176
Observations of mixed warm and cold electrons with RPC-MIP at comet 67P/Churyumov-Gerasimenko
P188: EPSC2018-230
Correction of Low-Energy Ion Measurements from Rosetta-ICA for the Effects of Spacecraft Charging
Bergman Sofia, Stenberg Wieser Gabriella, Wieser Martin, Johansson Fredrik

P189: EPSC2018-1075
Plasma waves near the diamagnetic cavity of comet 67P
Odelstad Elias, Eriksson Anders, Karlsson Tomas, Breuillard Hugo, Goetz Charlotte, Henri Pierre

P190: EPSC2018-951
An analytic model of comet ionosphere chemistry
Vigren Erik

P191: EPSC2018-521
Observations with MEX and MAVEN in the Martian tail during late 2016
Stergiopoulou Katerina, Andrews David

P192: EPSC2018-613
Reduced Atmospheric Ion Escape Above Martian Crustal Magnetic Field
Fan Kai, Wei Yong, Fraenz Markus, Dubinin Eduard, Cui Jun, Chai Lihui, Rong Zhaojin, Zhong Jun, Mcfadden James, Connerney Jack

P193: EPSC2018-45
Ion Escape from Mars - Observations by Mars Express and MAVEN
Fränz Markus, Dubinin Eduard, Maes Lukas, McFadden Jim, Jakosky Bruce

P194: EPSC2018-319
Variability of the precipitating fluxes during September 2017 event
Martinez Antoine, Leblanc François, Witasse Olivier, Mondolo Ronan, Titov Dima, Romanelli Norberto, Chaufray Jean-Yves

P195: EPSC2018-437
Study of the couplings in the Mars’ atmosphere with the Mars Express MARSIS total electron content data set
Witasse Olivier, Sánchez-Cano Beatriz, Lester Mark, Blelly Pierre-Louis, Indurain Mikel, Cartacci Marco

P196: EPSC2018-22
Mars Nightside Ionosphere Structure revealed by MAVEN
Lillis Robert, Fillingim Matthew, Fowler Christopher, Andersson Laila, Mitchell David, Benna Mehdi, Elrod Meredith, Halekas Jasper, Espley Jared

END OF POSTER PROGRAMME TP6/SB21
**Terrestrial Planets**

**TP4 ExoMars - First results from the TGO and plans for the 2020 Rover and Surface Platform**

**Convener:** Håkan Svedhem  
**Co-conveners:** Maurizio Pajola; Manish R. Patel; Daniel Rodionov; Jorge Vago

**Lecture Room:** Jupiter

**08:30–10:15**  
**Chairperson:** M. Pajola  
**Introduction and Overview**

**08:30–08:45: EPSC2018-1106**  
ExoMars Trace Gas Orbiter - Status and future activities  
**Svedhem Håkan**, Vago Jorge L., Rodionov Daniel

**08:45–09:00: EPSC2018-141**  
CaSSIS - First images from science orbit  
**Thomas Nicolas**, Cremonese Gabriele, Almeida Miguel, Banaszkiewicz Marek, Becerra Patricio, Bridges John, Byrne Shane, Da Deppo Vania and the CaSSIS Science Team

**09:00–09:15: EPSC2018-413**  
Fine Resolution Epithermal Neutron Detector (FREND) onboard TGO. First results from cruise, elliptical capture orbit and science mapping phase.  

**09:15–09:30: EPSC2018-211**  
NOMAD on ExoMars Trace Gas Orbiter: status and preliminary results  
**Vandaele Ann**, Lopez-Moreno Jose-Juan, Bellucci Giancarlo, Patel Manish R., Daerden Frank, Thomas Ian R., Neefs Eddy, Ristic Bojan, Berkenbosch Sophie, Beeckman Bram, Clairquin Roland, Queirolo Claudio and the NOMAD Team

**09:30–09:45: EPSC2018-831**  
The Atmospheric Chemistry Suite (ACS) on board the ExoMars Trace Gas Orbiter  
**Koralev Oleg**, Montmessin Franck, Trokhimovskyi Alexander, Fedorova Anna, Ignatiev Nikolay, Shakun Alexey, Grigoriev Alexey and the ACS Team

**Surface and Subsurface Investigations**

**09:45–10:00: EPSC2018-272**  
Ices, frosts and clouds on Mars observed by CaSSIS during the first months of TGO’s primary science mission  
**Pommerol Antoine**, Thomas Nicolas, Yoldi Zurine, Roloff Victoria, Almeida Miguel, Becerra Patricio, Tulyakov Stepan, Tornabene Livio, Seelos Frank, Bapst Jonathan, Hansen Candice, Portyankina Ganna, Lucchetti Alice, Pajola Maurizio, DoutéSylvain, Patel Manish, Cremonese Gabriele

**10:00–10:15: EPSC2018-455**  
Short-Term Equatorial Albedo Changes on Mars: Deliquescence or Dust?  
**McEwen Alfred**, Thomas Nicolas, Pommerol Antoine, Leung Cecilia, Sutton Sarah, Perry Jason, Scheidt Stephen, Chojnacki Matthew

**10:15 Coffee break**

**10:45–12:30**  
**Chairperson:** H. Svedhem  
**Trace Gasses Investigations**

**10:45–11:00: EPSC2018-790**  
Performance and the sensitivity of the ACS MIR channel, first months of solar occultations  
**Trokhimovskyi Alexander**, Fedorova Anna, Patrakeev Andrey, Kokonkov Nikita, Bertaux Jean-Loup, Shakun Alexey, Montmessin Franck, Koralev Oleg

**11:00–11:15: EPSC2018-773**  
Preliminary results on water vapor retrievals from the first data of TGO/NOMAD  
**Aoki Shohei**, Vandaele Ann Carine, Robert Séverine, Thomas Ian R., Trompet Loïc, Erwin Justin T., Piccialli Arianna, Mahieu Alex, Daerden Frank, Neary Lori, Viscardi Sébastien, Ristic Bojan, Villanueva Geronimo L., Liuzzi Giuliano, Mumma Michael J., Smith Michael D., Giannini Marco, Patel Manish R., Bellucci Giancarlo, Lopez-Moreno Jose Juan and the NOMAD team

**11:15–11:30: EPSC2018-1150**  
Wide-altitude range H$_2$O profile from ACS MIR and ACS NIR data  
**Fedorova Anna**, Montmessin Franck, Trokhimovskyi Alexander, Koralev Oleg, Kevin Olsen, Lomakin Alexander, Korsa Syvatoslav, Patrakeev Andrey, Shakun Alexey, Bertaux Jean-Loup

**11:30–11:45: EPSC2018-472**  
Exploring HDO and H$_2$O on Mars with the ACS instrument onboard TGO  
**Montmessin Franck**, Fedorova Anna, Koralev Oleg, Trokhimovskyi Alexander, Olsen Kevin, Rossi Loic, Fouquet Thierry, Encrenaz Thérèse, Lellouch Emmanuel, Jean-Loup Bertaux

**11:45–12:00: EPSC2018-742**  
Model expectations for the D/H distribution on Mars as observed by NOMAD  

**12:00–12:15: EPSC2018-925**  
Observations of carbon monoxide (CO) by the Atmospheric Chemistry Suite (ACS) on board the Trace Gas Orbiter  
**Lefèvre Franck**, Fedorova Anna, Trokhimovskyi Alexander, Belyaev Denis, Ignatiev Nikolay, Grigoriev Alexey, Savelyeva Natalia, Shakun Alexey, Olsen Kevin, Montmessin Franck, Koralev Oleg
12:15–12:30: EPSC2018-665
First measurements of Martian CO by NOMAD/EMTGO

12:30 Lunch break

14:00–15:45
Chairperson: M. Patel

14:00–14:15: EPSC2018-490
Performance of the ACS NIR channel and O2 profiles
Fedorova Anna, Trokhimovskiy Alexander, Korablev Oleg, Montmessin Franck, Gizatullin Karim, Betsis Daria, Lomakin Alexander, Patrakkev Andrey, Kokonkov Nikita, Shpak Alexey, Bertaux Jean-Loup

14:15–14:30: EPSC2018-1141
Ozone and total opacity observation with the NOMAD-UVIS spectrometer

14:30–14:45: EPSC2018-944
First retrievals of ozone vertical profiles from NOMAD-UVIS

The Thermal structure and Aerosols

14:45–15:00: EPSC2018-891
Monitoring of the atmosphere of Mars with ACS TIRVIM nadir observations on ExoMars TGO
Ignatiev Nikolay, Grigoriev Alexey, Shukan Alexey, Moshkin Boris, Patsaev Dmitry, Trokhimovskyk Alexander, Korablev Oleg, Grassi Davide, Vlasov Pavel, Zasova Ludmila, Guerlet Sandrine, Forget François, Montmessin Franck, Arnold Gabriele, Sazonov Oleg, Zharkov Alexander, Maslov Igor, Kungurov Andrey, Santos-Skipko Aleksandr, Shashkin Viktor and the ACS TIRVIM TEAM

15:00–15:15: EPSC2018-441
Occultation results by ACS TIRVIM at ExoMars TGO: aerosols and gases
Grigoriev Alexey, Shukan Alexey, Ignatiev Nikolay, Moshkin Boris, Patsaev Dmitry, Zharkov Alexander, Maslov Igor, Gorinov Dmitry, Kungurov Andrey, Santos-Skipko Aleksandr, Shashkin Viktor, Martynovich Fedor, Sazonov Oleg, Stupin Igor, Merzlyakov Dmitry, Nikolsky Yury, Luginin Mikhail, Trokhimovskyk Alexander, Montmessin Franck, Korablev Oleg

15:15–15:30: EPSC2018-760
Preliminary results on carbon dioxide and temperature profiles from NOMAD SO
Trompet Loïc, Vandeaele Ann Carine, Thomas Ian, Robert Séverine, Aoki Shohei, Erwin Justin, Piccialli Arianna, Wilquet Valérie, Funke Bernd, Hill Brittany, Lopez-Valverde Miguel Angel, Lopez-Puertas Manuel, Lopez-Moreno José Juan, García-Comas Maya, Giuranna Marco, Oliva Fabrizio, Daerden Frank, Bellucci Giancarlo, Patel Manish, Mahieux Arnaud and the NOMAD team

15:30–15:45: EPSC2018-794
CO2 density and temperature profiles of Mars atmosphere: first retrievals from the ACS MIR solar occultations
Belyaev Denis, Montmessin Franck, Fedorova Anna, Bertaux Jean-Loup, Olsen Kevin, Trokhimovskyk Alexander, Patrakkev Andrey, Shukan Alexey, Korablev Oleg

END OF WEDNESDAY ORAL PROGRAMME TP4
ORAL PROGRAMME TP4 CONTINUES ON THURSDAY

TP8/OPS11/MD5/SB23 Volcanism and tectonism across the Solar system (co-organized)

Convener: Petr Broz
Co-conveners: Paul Byrne; Ernst Hauber; Vera Assis Fernandes; Nicolle Zellner; Clive Neal
Lecture Room: Venus

14:00–15:30
Chairperson: Vera Assis Fernandes

14:00–14:15: EPSC2018-609
A new look at the Moon using Chang’e-2 microwave radiometer data (solicited talk)
Bugiolacchi Roberto, Hu Guoping, Chan Kwang Lam

14:15–14:30: EPSC2018-968
HI/W insights into the primeval Moon (solicited talk)
Thiemens Maxwell, Sprung Peter, Fonseca Raúl, Leitzke Felipe, Münker Carsten

14:30–14:45: EPSC2018-430
Deep tectonics exposed in northern Valles Marineris, Mars
Gurgurewicz Joanna, Mege Daniel

14:45–15:00: EPSC2018-884
The impact of data resolution and magmatic resurfacing events on understanding fault growth behaviour in the volcanic regions of Iceland and Mars
Bramham Emma, Paton Douglas

15:00–15:15: EPSC2018-193
How to Measure Io’s Lava Eruption Temperatures with a Novel Infrared Detector and Readout Circuit
Davies Ashley, Soibel Alexander, Ting David, Johnson William, Hayne Paul, Blackwell Megan
15:15–15:30: EPSC2018-112
Possible Subsurface Sediment Mobilization and Release of Volatiles in Southern Chryse Planitia, Mars
Brož Petr, Hauber Ernst, van de Burgt Ilse

END OF ORAL PROGRAMME TP8/OPS11/MD5/SB23

Outer Planet Systems

OPS5/TP11 Aerosols and clouds in planetary atmospheres (co-organized)
Convener: Nathalie Carrasco
Co-conveners: Anni Määttänen; P. Lavvas
Lecture Room: Uranus

08:30–10:15
Chairperson: Nathalie Carrasco

08:30–08:45: EPSC2018-194
Expanded line-of-sight extinction measurements from the Mars Science Laboratory at Gale Crater, Mars
Smith Christina, Moores John, Moore Casey, Guzewich Scott

08:45–09:00: EPSC2018-371
Methane and ethane adsorption and nucleation on tholins
Rannou Pascal, Curtis Daniel, Cordier Daniel

09:00–09:15: EPSC2018-718
Spatial and temporal variability of Titan’s detached haze layer during the Cassini mission
Seignovert Benoît, Rannou Pascal, West Robert A.

09:15–09:30: EPSC2018-69
Comparison of soluble and insoluble organic matter in analogues of Titan’s aerosol
Maillard Julien, Carrasco Nathalie, Gautier Thomas, Schmitz-Afonso Isabelle, Afonso Carlos

09:30–09:45: EPSC2018-594
Identifying the enigmatic Haystack and HASP ice clouds observed by CIRS in Titan’s stratosphere
Nna-Mvondo Delphine, Anderson Carrie M., Samuelson Robert E.

09:45–10:00: EPSC2018-659
Photodesorption and Photochemistry of Titan’s Aerosol Analogs
Gudipati Murthy, Fleury Benjamin, Couturier-Tamburelli Isabelle, Carrasco Nathalie

10:00–10:15: EPSC2018-200
Evolution of organic aerosols under conditions similar to Titan’s ionosphere
Chatain Audrey, Carrasco Nathalie, Guaitella Olivier, Ruscassier Nathalie

END OF ORAL PROGRAMME OPS5/TP11

OPS6/TP17/EXO8 Planetary aeronomy: Near and afar (co-organized)
Convener: Tommi Koskinen
Co-conveners: Antonio Garcia Munoz; P. Lavvas
Lecture Room: Uranus

10:45–12:15
Chairperson: Tommi Koskinen

10:45–11:00: EPSC2018-656
Four years of upper atmospheric exploration at Mars with MAVEN and IUVS (solicited talk)
Montmessin Franck, Schneider Nicholas, Deighan Justin, Jain Sonal, Evans Scott, Crismani Matteo, Stevens Michael, Lo Daniel, Clarke John, Chaffin Michael, Mayyasi Majd, Lefevre Franck, Stiepen Arnaud, Royer Emilio, Milby Zachariah, Groeller Hannes, Yelle Roger, Nakagawa Hiromu

11:00–11:10: EPSC2018-405
Ionization Efficiency in the Dayside Martian Upper Atmosphere
Wu Xiaoshu, Cui Jun, Xu Shaoai

11:10–11:25: EPSC2018-1233
Ground-based observations of hot exoplanet upper atmospheres (solicited talk)
Wytenbach Aurélien

11:25–11:40: EPSC2018-589
Modeling the Upper Atmospheres of Exoplanets: Energy Deposition and Escape (solicited talk)
Glocer Alex, Cohen Ofer, Airapetian Vladimir, Garcia-Sage Katherine, Gronoff Guillaume, Kang Suk-Bin, Danchi William

11:40–11:50: EPSC2018-399
A large grid of super-Earth upper atmosphere models and its application to planetary evolution
Kubyshkina Daria, Fossati Luca, Erkaev Nicolay, Johnstone Colin, Cubillos Patricio, Kisyakova Kristina, Lammer Helmut, Lendl Monika, Odert Petra

11:50–12:05: EPSC2018-1200
Results and thoughts on H3+ observations of solar system giant planets (solicited talk)
ODonoghue James, Melin Henrik, Moore Luke, Stallard Tom

12:05–12:15: EPSC2018-919
Energy balance in Saturn’s upper atmosphere
Müller-Wodarg Ingo, Koskinen Tommi, Moore Luke, Mendillo Michael

END OF ORAL PROGRAMME OPS6/TP17/EXO8
Modelling and Database

MD2/MTI4/LFI4 Machine Learning for Planetary Science in times of increasing data volume and complexity (co-organized)

Convener: Mario D’Amore  
Co-conveners: Stéphane Erard; Jörn Helbert  
Lecture Room: Neptune

08:30–10:00

08:30–08:45: EPSC2018-679
Automated detection of planetary craters: open and reproducible benchmark platform for the Martian surface  
Van den Bossche Joris, Boucaud Alexandre, Schmidt Frédéric, Lemaitre Guillaume, Lagain Anthony, Meresescu Alina, Kégl Balázs

08:45–09:00: EPSC2018-798
Deep Learning-Based Anomaly Detection to Find Changes over the Martian South Pole  
Putri Alfiah Rizky Diana, Sidiropoulos Panagiotis, Muller Jan-Peter

09:00–09:15: EPSC2018-829
Detection of early warning signals in paleoclimate data using a genetic time series segmentation algorithm  
Nikolaou Athanasia, Gutiérrez Pedro Antonio, Durán Rosal Antonio, Fernández-Navarro Francisco, Hervás-Martínez César, Pérez-Ortiz María

09:15–09:30: EPSC2018-844
Advanced Techniques for Signal Search and Automatic Classification of Observational Space Data  
Al-Ubaidi Tarek, Khodachenko Maxim, Kern Roman, Granitzer Michael, Poedts Stefaan

09:30–09:45: EPSC2018-1089
Detection of sub-km craters on Mars for equilibrium population statistics  
Francis Alistair, Muller Jan-Peter, Sidiropoulos Panagiotis, Persaud Divya

09:45–10:00: EPSC2018-738
Semi-automated surface mapping via unsupervised classification Mercury’S Visible-Near-Infrared reflectance spectra  
D’Amore Mario, Helbert Jörn, Maturilli Alessandro, Varatharajan Indhu

END OF ORAL PROGRAMME MD2/MTI4/LFI4

Missions, Techniques and Industry

MTI5 Future Planetary missions and instrumentation (L class, M class, New frontiers, Discovery, etc.)

Convener: Brook Lakew  
Co-conveners: Olivier Mousis; Kim Reh; Anil Bhardwaj; Frank Jansen  
Lecture Room: Saturn

08:30–10:15
Chairpersons: Brook Lakew, Olivier Mousis

08:30–08:45: EPSC2018-468
Hera - the European contribution to the first Asteroid deflection demonstration  
Küppers Michael, Michel Patrick, Carnelli Ian

08:45–09:00: EPSC2018-499
Design and development of an interferometric readout for planetary seismometers.  
Fayon Lucile, Halloin Hubert, Lognonné Philippe, De Raucourt Sébastien

09:00–09:15: EPSC2018-652
AIRS: the Infrared Spectroscopic Instrument of ESA M4 ARIEL mission  
Amiaux Jerome, Berthé Michel, Boulade Olivier, Cara Christophe, Lagage Pierre Olivier, Moreau Vincent, Hamm Vincent, Morinaud Gilles, Olivier Marc, André Yves, Geoffray Hervé, Eccleston Paul, Middelton Kevin, Pascale Enzo, Freiricks Martin, Focardi Mauro, Pace Emanuele

09:15–09:30: EPSC2018-77
Multiband, infrared imager for study of high temperature volcanism on Io  
Soibel Alexander, Davies Ashley G., Ting David, Johnson William, Blackwell Megan, Hayne Paul

09:30–09:45: EPSC2018-696
FOSSIL: Fragments from the Origins of the Solar System and our Interstellar Locale  
Horanyi Mihaly and the FOSSIL

09:45–10:00: EPSC2018-715
Observations of Transient Luminescent Phenomena on the Moon From a Deep Space Platform  
Oberst Jürgen

10:00–10:15: EPSC2018-771
Exploring the Ice Giant Systems  
Hofstadter Mark, Simon Amy

10:15 Coffee break
10:45–12:30
Chairpersons: Kim Reh, Anil Bhardwaj

10:45–11:00: EPSC2018-462
The Surface Dust Analyzer (SUDA) on Europa Clipper
Kempf Sascha

11:00–11:15: EPSC2018-820
Europe’s future exploration of Main Belt Comets
Snodgrass Colin, Jones Geraint, Bowles Neil, Gibbings Alison, Taylor Matt, Franchi Ian, Sheridan Simon

11:15–11:30: EPSC2018-937
Exploring geospace via solar wind charge exchange X-rays
Branduardi-Raymont Graziella, Sembay Steve, Carter Jenny, Ezoe Yuichiro

11:30–11:45: EPSC2018-994
Rotational push-broom Imaging from a Planetary Penetrator
Brydon George, Jones Geraint

11:45–12:00: EPSC2018-1042
Jovian Neutrals Analyzer for the Particle Environment Package onboard JUICE
Shimoyama Manabu, Asamura Kazushi, Pontoni Angèle, Neuland Maike, Karlsson Stefan, Wieser Martin, Futaana Yoshifumi, Barabash Stas

12:00–12:15: EPSC2018-1076
Penetrators as a deployment tool for Mass Spectrometer instrumentation
Sheridan Simon, Barber Simeon, Morse Andrew, Snodgrass Colin

12:15–12:30: EPSC2018-1178
DEMODCRITOS: Demonstrator Projects for MW class Nuclear Spacecraft
Detsis Emmanuel, Worms Jean-Claude

12:30 Lunch break

14:00–15:45
Chairpersons: Brook Lakew, Frank Jansen

14:00–14:15: EPSC2018-1188
Proposed Hyperspectral Imager for Planetary Surface Missions
Huntly Carys, Langstaff Dave, Gunn Matt, Laurent Boris, Cross Rachel, Tyler Laurence, Knight Tom

14:15–14:30: EPSC2018-1213
Utilisation Opportunities on the Lunar Orbital Platform - Gateway
Carpenter James, Hatton Jason

14:30–14:45: EPSC2018-1282
Towards a European Stratospheric Balloon Observatory - Planetary Science Applications
Maier Philipp, Wolf Jürgen, Keilig Thomas, Krabbe Alfred, Dufard René, Ortiz Jose Luis, Klinkner Sabine, Lengowski Michael, Müller Thomas, Lockwood Christian, Kroksstedt Christian, Kappellmann Norbert, Stelzer Beate, Werner Klaus, GeierStephan, Kalkuhl Christoph, Rauch Thomas, Schanz Thomas, Barnstedt Jürgen, Conti Lauro, Hanke Lars, Angerhausen Daniel

14:45–15:00: EPSC2018-236
Supporting M5 Science Missions to Small Bodies - An OHB Perspective
Gibbings Alison, Oberst Juergen, Snodgrass Colin, Bowles Neil, Franchi Ian

15:00–15:15: EPSC2018-355
Venturing to Near-Earth Asteroid systems using Nuclear Electric Propulsion
Damme Friedrich, Oberst Jürgen, Jansen Frank

A Proposed Mission to Very Low Mars Orbit - Supported by an Electric Propulsion System
Wickhusen Kai, Oberst Jürgen, Damme Friedrich

15:30–15:45: EPSC2018-370
Emirates Mars Mission (EMM) 2020 Overview

END OF ORAL PROGRAMME MTI5

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**Exoplanets and Origins**

**EXO2 Formation and Dynamical Evolution of Planetary Systems**

Convener: Ravi Helled
Co-convener: Yann Alibert
Lecture Room: Neptune

10:45–12:15
Chairperson(s): N.N.

10:45–11:00: EPSC2018-13
The First Accurate and Quantitative Model of the Formation of Terrestrial Planets and Origin of Earth’s Water
Haghighipour Nader, Maindl Thomas

11:00–11:15: EPSC2018-32
One step closer to unveiling the planetesimal-formation process
Blum Jürgen

11:15–11:30: EPSC2018-59
Metallicity effect and planet mass function in pebble-based planet formation models
Brügger Natacha, Alibert Yann, Ataiee Sareh, Benz Willy

11:30–11:45: EPSC2018-132
Gradual desiccation of rocky protoplanets from aluminum-26 heating
Lichtenberg Tim, Golabek Gregor J., Burn Remo, Meyer Michael R., Alibert Yann, Gerya Taras V., Mordasini Christoph A.
11:45–12:00: EPSC2018-231
On the stability of 3D exoplanetary systems
Volpi Mara, Libert Anne-Sophie, Roisin Arnaud

12:00–12:15: EPSC2018-345
Destruction by Protoplanetary Winds - How Stable are Planetesimals?
Demirci Tunahan, Kruss Maximilian, Teiser Jens, Bogdan Tabea, Jungmann Felix, Schneider Niclas, Wurm Gerhard

12:15 Lunch break

14:00–15:30

14:00–14:15: EPSC2018-376
Reproducing the Architecture of TRAPPIST-1 using Global Formation and Evolution Models
Burn Remo, Alibert Yann, Mordasini Christoph, Leleu Adrien, Schlecker Martin

14:15–14:30: EPSC2018-400
Layered semi-convection and tides in giant planet interiors
Andre Quentin, Mathis Stepheane, Barker Adrian

14:30–14:45: EPSC2018-439
Tidal dissipation in the host star of short-period exoplanetary systems
Mathis Stéphane, Bolmont Emeline, Gallet Florian, Damiani Cilia, Charbonnel Corinne, Amard Louis, Alibert Yann

14:45–15:00: EPSC2018-532
Do magnetic fields modify tidal dissipation in the convective envelope of low-mass stars along their evolution?
Astoul Aurélie, Mathis Stéphane, Baruteau Clément, Strugarek Antoine, Bolmont Emeline, Gallet Florian, Augustson Kyle

15:00–15:15: EPSC2018-608
Origin of close-in super-Earths: In-situ formation in an evolving disk due to disk winds
Ogihara Masahiro, Kokubo Eiichiro, Suzuki Takeru, Morbidelli Alessandro

15:15–15:30: EPSC2018-615
Geophysical Testing of Large Scale Migration of Planetesimals in the Early Solar System
Castillo Julie, Vernazza Pierre

END OF WEDNESDAY ORAL PROGRAMME EXO2
ORAL PROGRAMME EXO2 CONTINUES ON THURSDAY

EXO5 Plasma and magnetospheric environments of exoplanets: Modelling and probing

Convener: Maxim Khodachenko
Co-conveners: Ildar F. Shaikhislamov; Navin Dwivedi; Igor Alekseev
Lecture Room: Venus

08:30–10:00
Chairperson: Khodachenko M.L.

08:30–08:35: Introduction

08:35–08:45: EPSC2018-237
Influence of the dipolar magnetic field on the hot jupiter envelopes
Bisikalo Dmitry

08:45–08:55: EPSC2018-151
Global 3D multi-fluid aeronomy simulation of the HD 209458b
Shaikhislamov Ildar F., Khodachenko Maxim L., Al-Ubaidi Tarek, Lammer Helmut, Berezutsky Artem G., Miroshnichenko Ilya B., Rumenskikh Marina S.

08:55–09:05: EPSC2018-240
Modelling observability of Star-planet interaction
Fischer Christian, Saur Joachim

09:05–09:15: EPSC2018-1054
The Kompot Code: first-principles upper atmosphere modelling and the evolution of planetary atmospheres
Johnstone Colin

09:15–09:25: EPSC2018-461
Observations of fast-moving structures in the debris disk of AU Microscopii: A possible case of star-planet interactions at large orbital distances
Boccaletti Anthony, Sezestre Elie, Lagrange Anne Marie, Thébault Philippe

09:25–09:35: EPSC2018-830
The search for exoplanetary radio emission: Jupiter as an exoplanet
Grießmeier Jean-Mathias, Turner Jake D., Zarka Philippe, Iaroslavna Iaroslavna

09:35–09:45: EPSC2018-989
Planetary Magnetism as a Parameter in Exoplanet Habitability
McIntyre Sarah

09:45–09:55: EPSC2018-1134
Alfvenic current system in Saturn’s magnetosphere and time variation of the magnetic field in the outer Saturn magnetosphere.
Alexeev Igor, Belenkaya Elena, Cowley Stan, Lavrukhin Aleksander, Parunakian David, Pensionerov Ivan

09:55–10:00: Summary

END OF ORAL PROGRAMME EXO5
**Small Bodies (comets, KBOs, rings, asteroids, meteorites, dust)**

**SB2 Asteroid shapes from near and far**

**Convener:** Anna Marciniak  
**Co-conveners:** Thomas Müller; Josef Durech  
**Lecture Room:** Uranus

**14:00–15:45**  
**Chairperson:** Josef Durech

14:00–14:15: EPSC2018-135  
*ESO/VLT/SPHERE Survey of D≥100km Asteroids (2017-2019): First Results*  
**Vernazza Pierre** and the HARISSA team

14:15–14:30: EPSC2018-534  
*ESO/VLT/SPHERE Survey of D≥100km Asteroids (2017-2019): (16) Psyche*  
**Vilkinoski Matti** and team

14:30–14:45: EPSC2018-153  
*ESO/VLT/SPHERE Survey of D≥100km Asteroids (2017-2019): (7) Iris*  
**Hanus Josef** and the HARISSA team

14:45–15:00: EPSC2018-746  
The Thermal Response of Asteroid Surfaces: Results from ESO Large Programme  

15:00–15:15: EPSC2018-1053  
Asteroid spin properties derived from thermal data  
**Müller Thomas**, Ali-Lagoa Victor, Durech Josef, Marciniak Anna, Szakáts Róbert

15:15–15:30: EPSC2018-489  
Thermal properties of slowly rotating asteroids  
**Marciniak Anna**, Müller Thomas, Ali-Lagoa Victor, Bartczak Przemysław

15:30–15:45: EPSC2018-178  
Physical properties of asteroids using the WFCAM Transit Survey and the Virtual Observatory  
**Cortes-Contreras Miriam**, Jiménez-Esteban Francisco, Solano Enrique, Carry Benoit, Rodríguez Carlos

**END OF ORAL PROGRAMME SB2**

**SB12/MD10 Imaging, photometry and spectroscopy of small bodies and planetary surfaces: theory and methods (co-organized)**

**Convener:** Stéphane Erard  
**Co-convener:** Frédéric Schmidt  
**Lecture Room:** Mars

**14:00–15:45**

14:00–14:15: EPSC2018-222  
Dust environment of distant comet C/2014 A4 (SONEAR)  
**Ivanova Oleksandra**, Kolokolova Ludmilla, Das Himadri Sekhar, Luk’yanyk Igor, Afanasiev Viktor

14:15–14:30: EPSC2018-1229  
Transient Tracker: An easier way to (photometrically) catch an asteroid or comet.  
**Gay Pamela**, Myers Joseph

14:30–14:45: EPSC2018-273  
MOVIS catalog: near-infrared colors and taxonomy of asteroids observed by VISTA-VHS survey  
**Popescu Marcel**, Licandro Javier, de Leon Julia, Morate David, Boaca Ioana Lucia

14:45–15:00: EPSC2018-943  
Corrections of the PFS/MEx perturbations  
**Meresescu Alina G.**, Kowalski Matthieu, Schmidt Frederic

15:00–15:15: EPSC2018-952  
Stray light in Rosetta/VIRTIS-H  
**Andrieu François**, Érard Stéphane, Bockelée-Morvan Dominique

15:15–15:30: EPSC2018-537  
Progressive metaheuristics for high-dimensional radiative transfer model inversion  
**Gabasova Leila**, Blanchard Nicolas, Schmitt Bernard, Grundy Will and the New Horizons COMP team

15:30–15:45: EPSC2018-358  
Photometry of Europa with Hapke model  
**Belgacem Ines**, Schmidt Frédéric, Jonniaux Grégory

**END OF ORAL PROGRAMME SB12/MD10**
SB18/EXO7 Mathematical simulations and observations of gas-dust environment in planets, small bodies and protoplanetary disks. (co-organized)

Convener: Stavro Ivanovski
Co-conveners: Vincenzo Della Corte; Alessandra Rotundi; Vladimir Zakharov
Lecture Room: Venus
10:45–12:30
Chairperson: Stavro Ivanovski
10:45–11:00: EPSC2018-436
The cradle of the Sun
Pfalzner Susanne, Vincke Kirsten
11:00–11:15: EPSC2018-314
Asymptotics for spherical particle motion in a spherically expanding flow
Zakharov Vladimir, Ivanovski Stavro, Della Corte Vincenzo, Rotundi Alessandra, Fulle Marco
11:15–11:30: EPSC2018-1110
Non-spherical dust dynamics in protoplanetary disks: the effects of particle nonsphericity on the evolution timescales
Ivanovski Stavro, Turrini Diego, Capria Maria Teresa, Polychroni Danae, Rotundi Alessandra, Della Corte Vincenzo
11:30–11:45: EPSC2018-1145
Pebble isolation and planetesimal formation by Super Earth planets
Surville Clément, Mayer Lucio, Alibert Yann
11:45–12:00: EPSC2018-35
Did a stellar fly-by shape the outer solar system?
Pfalzner Susanne, Bhandare Asmita, Vincke Kirsten, Lacerda Pedro
12:00–12:15: EPSC2018-1052
Dust dynamical traceback problem for derivation the surface properties of 67P/Churyumov-Gerasimenko based on the GIADA measurements
Ivanovski Stavro, Zakharov Vladimir, Della Corte Vincenzo, Rotundi Alessandra, Fulle Marco
12:15–12:30: EPSC2018-304
Derivation of gas and dust surface fluxes on comet 67P
Zakharov Vladimir, Marzari Francesco, Ivanovski Stavro, Bertini Ivano, Della Corte Vincenzo, Rotundi Alessandra, Fulle Marco

END OF ORAL PROGRAMME SB18/EXO7

Laboratory and Field Investigations

LFI3 Cometary, asteroidal and meteoritic materials in laboratory

Convener: Gabriele Arnold
Co-conveners: Eric Quirico; Simone De Angelis; Marco Ferrari; Rosario Brunetto
Lecture Room: Mars
08:30–10:15
Chairperson: Gabriele Arnold
08:30–09:00: EPSC2018-24
Irradiation of meteorites: decoding space weathering on low albedo asteroids
Lantz Cateline, Brunetto Rosario
09:00–09:15: EPSC2018-34
Nature and occurrence frequency of heating processes in CM and C2-ungrouped chondrites as revealed by insoluble organic matter
09:15–09:30: EPSC2018-116
Reflectance spectra of solid organic acids and their mixtures with Fe-sulfide pyrrhotite: Insights into the surface composition of comet 67P/CG
Meißner Xenia, Moroz Ljuba, Arnold Gabriele, Rademann Klaus
09:30–09:45: EPSC2018-788
Reflectance of low-albedo dusts and water ice mixtures. Application to the surface of comet 67P.
Yoldi Zurine, Pommereau Antoine, Thomas Nicolas
09:45–10:00: EPSC2018-412
Comet simulation experiments - a simplified approach
Kaufmann Erika, Hagermann Axel
10:00–10:15: EPSC2018-308
The tensile strength of ice and dust aggregates
Kreuzig Christoph, Gundlach Bastian, Bischoff Dorothea, Kothe Stephan, Blum Jürgen, Rezaei Farangis, Schmidt Kim Paul, Grzesik Benjamin, Stoll Enrico
10:15 Coffee break
10:45–12:30: EPSC2018-1090
Impact ionization experiments with porous cosmic dust particle analogs
Sterken Veerle, Moragas-Klostermeyer Georg, Hillier Jon, Fielding Lee, Srama Ralf

11:00–11:15: EPSC2018-385
2D and 3D FTIR hyperspectral imaging of the Paris meteorite
Dionnet Zélia, Borondics Ferenc, Aléon-Toppiani Alice, Baklouti Donia, Brisset François, Djouadi Zahia, King Andrew, Sandt Christophe, Troadecl David, Brunetto Rosario

11:15–11:30: EPSC2018-683
From laser experiments to nature: How accurately can we reproduce space weathering?
Fazio Agnese, Harries Dennis, Schmidt Doreen, Pollok Kilian, Langenhorst Falko

11:30–11:45: EPSC2018-674
Design, Development and Testing of an Environmental P-T Cell for InfraRed Spectroscopy Measurements
De Angelis Simone, Ferrari Marco, De Sanctis Maria Cristina, Biondi David, Boccaccini Angelo, Formisano Michelangelo, Morbidini Alfredo, Ammannito Eleonora, Di Iorio Tatiana

11:45–12:00: EPSC2018-333
Analysis of reflectance spectra of enstatite-oldhamite mixtures for comparison with 2867 Steins
Markus Kathrin, Arnold Gabriele, Moroz Lyuba, Henckel Daniela, Hiesinger Harald

12:00–12:15: EPSC2018-284
Space weathering in enstatite single crystals: Femtosecond laser pulse experiments simulate micrometeoroid impacts
Schmidt Doreen, Pollok Kilian, Matthäus Gabor, Nolte Stefan, Mutschke Harald, Langenhorst Falko

12:15–12:30: EPSC2018-672
Investigating reflectance properties of space weathered silicates: effect of swift heavy ion irradiation
Carli Cristian, Brunetto Rosario, Strazzulla Giovanni, Serventi Giovanna, Poulet Francois, Capacci Fabrizio, Langevin Yves, Gardes Emmanuel, Martinez R. Rafael, Boduch Philippe, Domaracka Alicja, Rothard Hermann

END OF ORAL PROGRAMME LF13
**Outer Planet Systems**

**OPS1 Outer planets systems and Pluto**

Conveners: Athena Coustenis
Co-conveners: Glenn Orton; Sushil K. Atreya; Leigh Fletcher; Nicolas Altobelli
Chairpersons: N. Carrasco and D. Cordier
Attendance time: Wednesday, 16:15–18:00

P1: EPSC2018-198
Experimental study of ammonia formation in Titan’s ionosphere
Chatain Audrey, Carrasco Nathalie, Guaitella Olivier, Napoleononi Maryse, Vettier Ludovic, Cernogora Guy

P2: EPSC2018-1060
First Ion Insights during Titan’s Ionosphere Relevant Gas Mixture EUV Irradiation
Bourgalaits Jeremy, Vettier Ludovic, Tigrine Sarah, Cernogora Guy, Carrasco Nathalie

P3: EPSC2018-307
Retrieval of surface spectra in region around Titan’s polar lakes
Coutelier Maélie, Cordier Daniel, Rannou Pascal

P4: EPSC2018-601
Investigating the surface distribution of N2, CH4 and CO ices on Triton with a volatile transport model
Bertrand Tanguy, Forget Francois, Sicardy Bruno, Lellouche Emmanuel

P5: EPSC2018-767
Spatial distribution of gaseous hydrogen cyanide on Neptune’s stratosphere revealed by ALMA
Iino Takahiro, Sagawa Hideo, Tsukagoshi Takashi

P6: EPSC2018-95
Some problems in interpretation of the New Horizons observations of Pluto’s atmosphere
Krasnopolsky Vladimir

P7: EPSC2018-374
Ground-based Doppler Velocimetry: wind measurements in Saturn’s atmosphere with UVES/VLT
Silva Miguel, Machado Pedro, Sánchez-Laveaga Agustín, Hueso Ricardo, Luz David, Peralta Javier

P8: EPSC2018-635
Ferraz-Mello Sylvio

P9: EPSC2018-1034
Seasonal variations in Titan’s stratospheric polar regions addressed with a Global Climate Model
Vatant d’Ollone Jan, Lebonnois Sébastien, Burgalat Jérémie

P10: EPSC2018-42
Modelling of seasonal lake level fluctuations of Titan’s seas/lakes
Tokano Tetsuya, Lorenz Ralph

P11: EPSC2018-142
Ice Giants Exploration: Dual and Twin Spacecraft Approaches
Politi Romolo, Turrini Diego, Grassi Davide, Peron Roberto, Cottini Valeria, Gorius Nicolas

**OPS3 Ocean worlds and Icy Moons**

Conveners: Alex Hayes
Co-conveners: Jean-Pierre Lebreton; Olivier Witasse; Athena Coustenis; Elizabeth Turtle; Federico Tosi
Chairperson: Olivier Witasse
Attendance time: Wednesday, 16:15–18:00

P12: EPSC2018-201
Exploring Oxidative Chemistry and Metabolic Pathways in Enceladus’ Ocean
Ray Christine, Waite Hunter, Glein Chris, Huber Julie

P13: EPSC2018-795
Modelling the Rock-Water Interface on Enceladus
Hamp Rachael, Olson-Francis Karen, Schwenger Susanne, Ramkisson Nisha, Pearson Victoria

P14: EPSC2018-86
Laboratory reflectance measurements of water ice/salt mixture irradiated by electrons
Cerubini Romain, Pommerol Antoine, Gall André, Yoldi Zurine, Poch Olivier, Oza Apurva, Wurz Peter, Thomas Nicolas

P15: EPSC2018-528
Onboard Detection of Thermal Anomalies for Europa Clipper
Doran Gary, Davies Ashley, Wagstaff Kiri, Anwar Saadat, Blaney Diana, Chien Steve, Christensen Phil, Diniega Serina

P16: EPSC2018-904
The Ganymede Laser Altimeter (GALA) for ESA’s Jupiter Icy Moons Explorer (JUICE) Mission

P17: EPSC2018-1066
Report on JUICE 3GM gravity experiment performance
Cappuccio Paolo, Di Benedetto Mauro, Casioli Giel, less Luciano

P18: EPSC2018-1085
The effect of Ganymede’s exosphere on JUICE’s determination of the moon’s gravity field
Hickey Anne, Durante Daniele, less Luciano, Plainaki Christina, Mura Alessandro, Milillo Anna

END OF POSTER PROGRAMME OPS1
**P19: EPSC2018-855**
The large bright ray crater Osiris on Ganymede: its age, role as a potential time-stratigraphic marker, and target for detailed imaging by the JUICE/JANUS Camera
Wagner Roland J., Stephan Katrin, Schmedemann Nico, Werner Stephanie C., Hoffmann Harald, Roatsch Thomas, Kersten Elke, Jaumann Ralf, Palumbo Pasquale

**P20: EPSC2018-341**
Spectral properties of fresh impact craters in the Saturnian and Jovian system
Stephan Katrin, Jaumann Ralf, Dalle Ore Cristina, Filacchione Gianrico, Ciarniello Mauro, Cruikshank Dale

**P21: EPSC2018-914**
Modeling the Interior Evolution of Water-Rich Bodies: From Dust Aggregates to Ocean Worlds
Neumann Wladimir

**END OF POSTER PROGRAMME OPS3**

**OPS5/TP11 Aerosols and clouds in planetary atmospheres (co-organized)**
Convener: Nathalie Carrasco
Co-conveners: Anni Määttänen; P. Lavvas
Chairperson: Nathalie Carrasco
Attendance time: Wednesday, 16:15–18:00

**P24: EPSC2018-1210**
A Vapor Pressure Database for Modeling Planetary Atmospheres
Barth Erika L.

**P25: EPSC2018-745**
Titan’s polarization phase curves with Cassini/ISS
Illic Nikoleta, Antonio García Muñoz, Benoît Seignovert, Robert A. West, Benjamin Knowles, Panayotis Lavvas

**P26: EPSC2018-1232**
Calculation of high-level ab initio rate coefficients for key neutral-neutral reactions in low-temperature Titan conditions
Barua Shiblee R., Kao Der-you, Romani Paul N., Domagal-goldman Shawn D.

**END OF POSTER PROGRAMME OPS5/TP11**

**OPS6/TP17/EXO8 Planetary aeronomy: Near and afar (co-organized)**
Convener: Tommi Koskinen
Co-conveners: Antonio Garcia Munoz; P. Lavvas
Chairperson: Antonio Garcia Munoz
Attendance time: Wednesday, 16:15–18:00

**P27: EPSC2018-389**
Impact of Crustal Magnetic Fields on the Thermal Structure of the Martian Upper Atmosphere
Cui Jun, Yelle Roger, Stone Shane, Koskinen Tommi, Wu Xiaoshu, Zhao Lingling

**P28: EPSC2018-769**
Mass-loss rate constraints on the observed distribution of exoplanets
Cubillos Patricio, Fossati Luca, Erkaev Nikolai, Johnstone Colin, Lammer Helmut, Lendl Monika, Odert Petra, Kislyakova Kristina, Juvan Ines

**P29: EPSC2018-424**
The near-UV transmission spectrum of the prototypical hot Jupiter HD209458b
Fossati Luca, Cubillos Patricio, Koskinen Tommi, France Kevin, Lendl Monika, Aickara Gopinathan Sreejith

**P30: EPSC2018-419**
CUTE: A Small NUV Satellite Mission to Study Exoplanet Atmospheres
Fossati Luca, France Kevin, Flaming Brian, Aickara Gopinathan Sreejith, Egan Arika, Desert Jean-Michel, Koskinen Tommi, Petit Pascal, Vidotto Aline

**P31: EPSC2018-573**
An empirical model of Saturn’s thermosphere based on Cassini/UVIS occultations
Koskinen Tommi, Strobel Darrell, Brown Zarah

**END OF POSTER PROGRAMME OPS6/TP17/EXO8**

**Modelling and Database**

**MD3/TP13/OPS13 Multi-disciplinary approaches to investigate the shape, rotation, tides, interior structure and evolution of planets and moons (co-organized)**
Convener: Sebastiano Padovan
Co-conveners: Alexander Stark; Britney Schmidt; Krista Soderlund; Thomas Ruedas; Nicola Tosi; Lena Noack; Jürgen Oberst; Rose-Marie Baland; Dominic Dirkx; Gabriele Cremonese; Antoine Rozel; Ruth Ziethe
Chairperson: Lena Noack
Attendance time: Wednesday, 16:15–18:00

**P32: EPSC2018-1281**
Thermochemical and magmatic evolution of a heterogeneous lunar mantle Brian Doherty Brian, Plesa Ana-Catalina, Schwinger Sabrina, Breuer Doris

**P33: EPSC2018-25**
Radio Emissions from Electrical Activity in Martian Dust Storms
Majid Walid

**P34: EPSC2018-140**
The use of multifractal method for lunar topography analysis
Andreev Alexey, Nefediyev Yura, Demina Natalya, Petrova Natalia, Zagidullin Arthur, Demin Sergey
P35: EPSC2018-143
Analysis of moonquakes using space missions data and method of determining the long-periodic geodynamic components
Nefedev Yury, Andreev Alexey, Demina Natalya, Mubarakhshina Regina, Demin Sergey

P36: EPSC2018-173
Estimating coupled translational-rotational dynamics of solar system bodies
Dirkx Dominic, Mooij Erwin, Root Bart, Cowan Kevin

P37: EPSC2018-229
Impact of improved orbit and rotational models on the locations of the Mars Orbiter Laser Altimeter (MOLA) footprints
Xiao Haifeng, Stark Alexander, Annibali Serena, Oberst Jürgen

P38: EPSC2018-340
Bulk density of the lunar crust in high resolution
Wahl Daniel, Wieczorek Mark, Oberst Jürgen

P39: EPSC2018-427
Benchmark for tidal deformation in planetary shells of variable thickness
Behounkova Marie, Beuthe Mikael, Soucek Ondrej

P40: EPSC2018-507
Barkin’s lunar physical libration analytical theory and the possible detection of a free core nutation of the Moon
Petrova Natalia, Barkin Michel, Nefedev Yury, Zagidulin Artht, Andreev Alexey

P41: EPSC2018-691
The coupling between the polar motion and the spin precession of Titan
Baland Rose-Marie, Coyette Alexis, Van Hoolst Tim

P42: EPSC2018-785
Magma ocean lifetime and outgassing of the secondary atmosphere in a terrestrial planet.
Nikolaou Athanasia, Katyal Nisha, Tosi Nicola, Godolt Mereike, Grenfell John Lee, Rauer Heike

P43: EPSC2018-851
Synthetic geophysical observables from martian mantle convection models, with application to InSight
Ruedas Thomas, Breuer Doris

P44: EPSC2018-931
Measurement of Lunar rotation with Lunar Orbiter Laser Altimeter data
Stark Alexander, Annibali Serena, Oberst Jürgen, Hussmann Hauke

P45: EPSC2018-992
A short history of Mars True Polar Wander
Rosenblatt Pascal

P46: EPSC2018-845
Uncertainty on the core radius of Mars from nutation estimation
Yseboodt Marie, Rivoldini Atilio, Le Maistre Sebastien, Dehant Veronique

P47: EPSC2018-1063
Numerical simulations of multiple and single channel rivers on Earth and Titan - further results
Misuriu Katarzyna, Czechowski Leszek

P48: EPSC2018-1238
Mars nutation estimates from radio-tracking of landed missions prior InSight and ExoMars 2020
Le Maistre Sébastien, Dehant Véronique, Marty Jean-Charles

P49: EPSC2018-1022
The internal structure of Mars inferred from nutation
Rivoldini Atilio, Van Hoolst Tim, Beuthe Mikael, Deproost Marie-Hélène, Baland Rose-Marie, Yseboodt Marie, Le Maistre Sébastien, Péters Marie-Julie, Dehant Véronique

P50: EPSC2018-452
Crustal Magnetic Field Modeling From CHAMP and SWARM Satellite Magnetometer Observations
Boualem Saich, Mohamed Cherif Berguig, Mohamed Hamoudi

END OF POSTER PROGRAMME MD3/TP13/OPS13

Missions, Techniques and Industry

MT15 Future Planetary missions and instrumentation (L class, M class, New frontiers, Discovery, etc.)

Convener: Brook Lake
Co-conveners: Olivier Mousis; Kim Reh; Anil Bhardwaj; Frank Jansen
Chairpersons: Kim Reh, Olivier Mousis, Anil Bardwaj, Frank Jansen
Attendance time: Wednesday, 16:15–18:00

P51: EPSC2018-55
Advanced pointing imaging camera (APIC) concept
Park Ryan, Riedel Ed

P52: EPSC2018-65
SPRITE (Saturn PRObe Interior and aTmosphere Explorer): A Saturn Entry Probe Mission Concept
Atkinson David H., Simon Amy, Banfield Don, Areya Sushil, Blacksberg Jordana, Brinckerhoff Will, Colaprete Anthony, Coustenis Athena, Fletcher Leigh, Guillot Tristan, Hofstadter Mark, Lunine Jonathan, Mahaffy Paul, Marley Mark, Mousis Olivier, Spiiker Thomas, Trainer Melissa, Webster Chris

P53: EPSC2018-70
Mars Energetic Particles Analyzer onboard the Orbiter of China’s First Mars Exploration
Fu Qiang, Zhang Hongbo, Wang Yi, Zhang Zhoubin, Ren Xin
P54: EPSC2018-73
The Hera Saturn Entry Probe Mission Concept
Atkinson David H., Mousis Olivier, Spilker Thomas R., Venkatapathy Ethiraj, Coustenis Athena, Hofstadter Mark, Lebreton Jean-Pierre, Reh Kim, Simon Amy A.

P55: EPSC2018-74
A Joint NASA/ESA Mission Concept for In Situ Probe Explorations of the Ice Giants
Atkinson David H., Mousis Olivier, Spilker Thomas R., Coustenis Athena, Hofstadter Mark, Lebreton Jean-Pierre, Reh Kim, Simon Amy A.

P56: EPSC2018-206
MetNet Mission for Mars - Current Status and Future Prospects
Harri Ari-Matti, Aleksashkin Sergey, Arruego Ignacio, Schmidt Walter, Genzer Maria, Vazquez Luis, Haukka Harri

P57: EPSC2018-279
Analysis and Design for Parachute Deceleration and Landing Process on Mars
Bao Jinjin

P58: EPSC2018-293
Loss of potassium during the Moons history
Lammer Helmut, Vorburger Audrey, Scherf Manuel, Benedikt Markus, Wurz Peter, Nakamura Rumi, Dandouras Iannis, Yamauchi Masatoshi, Milli Ann, Galli André

P59: EPSC2018-326
Research on the asteroid landing and adhesion mechanism
Feng Rui

P60: EPSC2018-338
Proposed mission to Mars and his Trojan Asteroid Family - An Update Report
Wickhusen Kai, Oberst Jürgen, Willner Konrad

P61: EPSC2018-453
Lunar Active Experiment (LAX) for Lunar Water Investigations
Futaana Yoshifumi, Barabash Stas, Holmström Mats, S. Wieser Gabriella, Wang Xiao-Dong, Wieser Martin, Yamauchi Masatoshi, Persson Moa, Pontoni Angele, Wittmann Philipp

P62: EPSC2018-510
PRIDE: Near-field VLBI observations for Planetary Probes
Pallichadath Vidhya, Bahamón T. M., Bocanegra-, Cimó Giuseppe, Dirxk Dominic, Duev Dmitry. A, Gurvits Leonid.I, Lainey Valery, Calvés G. Molera, Vermeersen L.A (Bert)

P63: EPSC2018-578
The Science Process for Selecting the Landing Site for the 2020 Mars Rover
Grant John, Golombek Matthew, Wilson Sharon, Farley Kenneth, Williford Ken, Chen Al

P64: EPSC2018-809
Mapping Trojan Asteroids in the thermal infrared with TROTIS
Helbert Jörn, Maturilli Alessandro, D'Amore Mario, Grott Matthias, Knollenberg Joerg, Arnold Gabriele, Varatharajan Indhu, Palomba Ernesto, Okada Tatsuaki, Vannaza Pierre, Rivkin Andrew, Müller Thomas, Börner Anko, Walter Ingo

P65: EPSC2018-945
Observing Solar System Bodies with Twinkle
Edwards Billy, Savini Giorgio, Tinetti Giovanna, Bowles Neil, Lindsay Sean

P66: EPSC2018-1006
Scientific payload of the Emirates Mars Mission: Emirates Mars Ultraviolet Spectrometer (EMUS) overview
Loootah Fatma, Almatroushi Hessa, Holsclaw Greg, Deighan Justin, Chaffin Michael, Lillis Robert, Fillingim Matthew, England Scott, AlMheiri Suhail, Reed Heather

P67: EPSC2018-1007
Scientific Payload of the Emirates Mars Mission: Emirates Mars Infrared Spectrometer (EMIRS)
Badri Khalid, AlTunaiji Eman, Edwards Christopher, Smith Michael, AlDhafri Suhail, Reed Heather

P68: EPSC2018-1032
Scientific payload of the Emirates Mars Mission: Emirates Exploration Imager (EXI)
AlShamsi Mariam, Wolff Michael, Khooory Mohammed, Drake Ginger, Jones Andrew, AlMheiri Suhail, Reed Heather

P69: EPSC2018-1033
Impedance measurements for RIME dipole aboard JUICE
Hahnel Ronny, Plettemeier Dirk, Birmuske Reinhard, Hauser Adrian, Bruzzzone Lorenzo

P70: EPSC2018-1065
The MASTER imaging spectrometer for the JAXA/Okeanos mission

P71: EPSC2018-1131
Ultrasounds for regolith and dust particles manipulation
Gonzalez Iciar

P72: EPSC2018-1151
Research ideas in solar-system, lunar, and earth-sciences with Deep Space Gateway
Nakamura Rumi, Crawford Ian, Carpenter James

P73: EPSC2018-1169
Design of the calibration bench for the characterization of MAJIS/JUICE VIS-NIR detectors
**EXO5 Plasma and magnetospheric environments of exoplanets: Modelling and probing**

Convener: Maxim Khodachenko  
Co-conveners: Ildar F. Shaikhislamov; Navin Dwivedi; Igor Alekseev  
Chairperson: Shaikhislamov I.F.  
**Attendance time: Wednesday, 16:15–18:00**

**P79: EPSC2018-281**  
In-transit Lyα absorption by HD 209458b under different regimes of the planetary and stellar winds interaction  
**Khodachenko Maxim**, Shaikhislamov Il'dar, Dwivedi Navin, Lammer Helmut, Kislyakova Kristina, Fossati Luca, Johnstone Collin, Arkhipov Oleksiy, Berezutsky Artem, Miroshnichenko Ilya, Posukh Vitaly

**P80: EPSC2018-303**  
Multi-fluid modeling of upper atmosphere mass loss and absorption line for WASP-12b  
**Dwivedi Navin**, Shaikhislamov Il'dar, Khodachenko Maxim, Fossati Luca, Lammer Helmut, Kislyakova Kristina, Johnstone Collin, Güdel Manuel, Sasunov Yuri

**P81: EPSC2018-158**  
Modeling of the UV absorption by OI and CII in exosphere of the hot jupiter HD 209458b  
**Miroshnichenko Ilya B.**, Shaikhislamov Il'dar F., Khodachenko Maxim, Lammer Helmut, Berezutsky Artem G.

**P82: EPSC2018-126**  
Stellar wind interaction with the expanding atmosphere of Gliese 436b  
**Berezutskiy Artem**, Shaikhislamov Il'dar, Khodachenko Maxim, Miroshnichenko Ilya

**P83: EPSC2018-802**  
On the transit Lyα observations of terrestrial planets in the habitable zones of M dwarfs  
**Kislyakova Kristina**, Lammer Helmut, Odert Petra, Erkaev Nikolai, Holmström Mats

**P84: EPSC2018-1078**  
Sub-Alfvenic magnetosphere of a Hot Jupiter  
**Lavrukhin Alexander**, Parunakian David, Alexeev Igor

**P85: EPSC2018-19**  
On localization of exoplanets radiation belts  
**Perov Nikolai**, Abduragimov Anar

**P86: EPSC2018-641**  
Influence of Star-Planet Magnetic Torques on Orbital Secular Evolution  
**Ahuir Jérémy**, Strugarek Antoine, Benbakoura Mansour, Brun Allan-Sacha, Mathis Stéphane, Bolmont Emeline, Le Poncin-Lafitte Christophe, Réville Victor

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**Exoplanets and Origins**

**EXO4/TP14/OPS9/MD6 Matter Under Planetary Interior Conditions**  
(co-organized)  
**Convener:** Frank Sohl  
**Co-conveners:** Martin French; Zuzana Konopkova; Sebastiano Padovan  
**Chairperson:** F. Sohl  
**Attendance time:** Wednesday, 16:15–18:00

**P78: EPSC2018-857**  
Phase behaviour of methane hydrate under conditions relevant to Titan's interior  
**Sclater Gillian**

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**END OF POSTER PROGRAMME EXO5**
Small Bodies (comets, KBOs, rings, asteroids, meteorites, dust)

SB2 Asteroid shapes from near and far
Convener: Anna Marciniak
Co-conveners: Thomas Müller; Josef Durech
Chairperson: Anna Marciniak
Attendance time: Wednesday, 16:15–18:00

P88: EPSC2018-144
New insights into Pallas’ formation and collisional history from VLT/SPHERE and SOFIA/FORCAST
Marisset Michael, Vernazza Pierre and the HARISSA team

P89: EPSC2018-1107
Small Bodies Near and Far (SBNAF): Challenges in the Physical and Thermal Characterization of NEOs, MBAs and TNOs
Müller Thomas, Marciniak Anna, Kiss Csaba, Duffard Rene and the SBNAF team

P90: EPSC2018-747
Determination of spin axes and shapes of NEAs from one apparition
Kwiatkowski Tomasz

P91: EPSC2018-832
Physical parameters of near-Earth asteroid 2017 VR12 from radar and optical photometric observations
Bondarenko Yuri, Marshalov Dmitrii, Medvedev Yuri, Kornienko Gennady, Kochergin Anton, Zheltobryukhov Maxim, Benner Lance

End of Poster Programme SB2

SB12/MD10 Imaging, photometry and spectroscopy of small bodies and planetary surfaces: theory and methods (co-organized)
Convener: Stéphane Erard
Co-conveners: Frédéric Schmidt
Attendance time: Wednesday, 16:15–18:00

P92: EPSC2018-161
Photometric efficiency of a set of geometry
Schmidt Frédéric, Bourguignon Sébastien

P93: EPSC2018-378
Physical relevance of Independent Component Analysis of planetary radiance
Erard Stéphane

P94: EPSC2018-866
67P/C-G surface temperatures by linear spectral unmixing of Rosetta/VIRTIS-M - Method and first results - Combe Jean-Philippe, McCord Thomas, Capaccioni Fabrizio, Filacchione Gianrico, Tosi Federico, Raponi Andrea, Ciarniello Mauro, Kappel David, Rousseau Baptiste

Terrestrial Planets

TP4 ExoMars - First results from the TGO and plans for the 2020 Rover and Surface Platform
Convener: Håkan Svedhem
Co-conveners: Maurizio Pajola; Manish R. Patel; Daniel Rodionov; Jorge Vago
Chairperson: H. Svedhem
Attendance time: Wednesday, 16:15–18:00

P119: EPSC2018-145
CaSSIS - Targeting, Operations, and Data Reduction
Thomas Nicolas, Cremonese Gabriele, Almeida Miguel, Backer Jean, Becerra Patricio, Borriini Gaetano, Byrne Shane, Gruber Mario, Gubler Pascal, Heyd Rod and the CaSSIS Operations Team
P120: EPSC2018-171
Spectral clustering applied on the ExoMars-CaSSIS simulated imagery dataset
Pajola Maurizio, Tornabene Livio, Seelos Frank, Marzo Giuseppe, Lucchetti Alice, Cremonese Gabriele, Pommerol Antoine, Becerra Patricio, Thomas Nicholas

P121: EPSC2018-962
Evaluating the performance of CaSSIS elevation data for geomorphological and geological analyses
Conway Susan, Pozzobon Riccardo, Lucchetti Alice, Massironi Matteo, Simioni Emanuele, Re Cristina, Mudric Teo, Pajola Maurizio, Cremonese Gabriele, Thomas Nick

P122: EPSC2018-380
3DPP application to the first CaSSIS DTMs
Simioni Emanuele, Re Cristina, Mudric Teo, Pajola Maurizio, Lucchetti Alice, Pozzobon Riccardo, cambianica Pamela, Cremonese Gabriele, Pommerol Antoine, Thomas Nicolas

P124: EPSC2018-661
The NOMAD Spectrometer Suite on ExoMars Trace Gas Orbiter: First Results from the Commissioning and Nominal Science Phases
Thomas Ian, Vandaele Ann Carine, Robert Séverine, Trompet Loïc, Aoki Shohei, Depiessé Cédric, Willame Yannick, Wilquet Valérie, Picciali Arianna, Ristic Bojan, Daerden Frank, Erwin Justin, Berkenbosch Sophie, Clairquin Roland, Beeckman Bram, Neefs Eddy, Mason Jon, Patel Manish, Bellucci Giancarlo, Lopez Moreno José Juan and the NOMAD Team

P125: EPSC2018-654
The NOMAD Spectrometer Suite on ExoMars Trace Gas Orbiter: Data Products, Format and Availability in the ESA Planetary Science Archive
Thomas Ian, Vandaele Ann Carine, Daerden Frank, Depiessé Cédric, Willame Yannick, Trompet Loïc, Erwin Justin, Berkenbosch Sophie, Clairquin Roland, Beeckman Bram, Ristic Bojan, Queirolo Claudio, Neefs Eddy, Mason Jon, Sellers Graham, Leese Mark, HathiBrijen, Patel Manish, Bellucci Giancarlo, Lopez Moreno José Juan and the NOMAD Team

P126: EPSC2018-699
Calibration of the NOMAD-UVIS channel

P127: EPSC2018-235
Atmospheric model support for NOMAD on ExoMars/TGO
Daerden Frank, Neary Lori, Viscardi Sébastien, Erwin Justin, Lewis Stephen, Holmes James, Streeter Paul, González-Galindo Francisco, Kaminski Jacek, Lefèvre Franck, Vandaele Ann Carine, Lopez-Moreno José Juan, Bellucci Giancarlo, Patel Manish, Thomas Ian, Ristic Bojan and the NOMAD team

P128: EPSC2018-722
Definition of a surface index based on previous datasets, to be used on NOMAD/EMTGO spectra
Robert Séverine, Karatekin Ozgur, Gloesener Elodie, Ruel Louis, Carozzo Filippo Giacomo, Altiere Francesca, Vandaele Ann Carine, Daerden Frank, Thomas Ian R., Ristic Bojan, Bellucci Giancarlo, Patel Manish R., Lopez-Moreno José Juan and the NOMAD team

P129: EPSC2018-731
Preliminary results of dust and ice clouds retrieval using NOMAD/UVIS nadir measurements

P130: EPSC2018-565
Improved near-infrared high-resolution solar spectrum from ACS NIR onboard TGO
Gizatullin Karim, Trokhimovskiy Alexander, Fedorova Anna, Korablev Oleg, Montmessin Franck, Betsis Daria, Bertaux Jean-Loup, Spite Monique

P131: EPSC2018-786
Modeling of HDO in the Martian atmosphere
Rossi Loïc, Montmessin Franck, Forget François, Milour Ehouarn, Olsen Kevin, Vals Margaux, Fedorova Anna, Trokhimovskiy Alexander, Korablev Oleg

P132: EPSC2018-796
Preliminary results on sensitive search of minor species using the first data of TGO/NOMAD

P133: EPSC2018-854
Preliminary retrievals of CO₂ column densities using the first data of TGO/NOMAD

P134: EPSC2018-907
Preliminary assimilation of observations from ACS/TIR/VM on board ExoMars TGO into the LMD Mars GCM
Young Roland, Forget François, Guerlet Sandrine, Milour Ehouarn, Navarro Thomas, Ignatiev Nikolay, Grigoriev Alexey, Shakun Alexey, Trokhimovskiy Alexander, Montmessin Franck, Korablev Oleg
P135: EPSC2018-916
Spectroscopy and trace gas retrievals for the ExoMars Trace Gas Orbiter (TGO) Atmospheric Chemistry Suite mid-infrared (ACS MIR) solar occultation spectrometer using the JPL Gas Fitting software (GFIT)
Olsen Kevin, Montmessin Franck, Boone Chris, Toon Geoff, Fedorova Anna, Trokhimovskiy Alexander, Grigoriev Alexey, Patrakeev Andrey, Korabliev Oleg and the ExoMars TGO Science Working Team

P136: EPSC2018-861
Martian aerosol-free reflectance spectra as input to better constrain atmospheric dust content in the NOMAD/TGO nadir observations

P137: EPSC2018-647
Modeling of aerosols from TIRVIM solar occultations onboard ExoMars/TGO
Luginin Mikhail, Ignatiev Nikolay, Fedorova Anna, Grigoriev Alexey, Shakun Alexey, Trokhimovsky Aleksander, Montmessin Franck, Korabliev Oleg

P138: EPSC2018-1018
Development of a modified Tau-REx retrieval framework for processing the ExoMars TGO NOMAD data
Cann George, Muller Jan-Peter, Walton Dave, Waldmann Ingo

P139: EPSC2018-576
Solar wind modulation of galactic cosmic rays observed on board of ExoMars TGO
Koleva Rositsa, Semikova Jordanka, Benghin Viktor, Dachev Tsvetan, Matvichuk Yuri, Tomov Borislav, Krastev Krasimir, Malchev Stefan, Dimitrov Plamen, Mitrofanov Igor, Malahov Alexey, Golovin Dmitry, Mokrousov Maxim, Yermolaev Yuriy, Drobyshev Sergey

P140: EPSC2018-1192
ExoMars 2016 Schiaparelli at Mars: AMELIA results from the 'terrific' six minutes before crashing
Ferri Francesca, Karatekin Ozgur, Aboudan Alessio, Colombatti Giacomo, Van Hove Bart, Bettanini Carlo, Debei Stefano, Lewis Stephen, Forget Francois

P141: EPSC2018-1211
Reconstruction of the Mars atmosphere using the flight data of ExoMars Schiaparelli's instrumented heat shield and radio communications
Karatekin Ozgur, Van Hove Bart, Ferri Francesca, Aboudan Alessio, Colombatti Giacomo

P142: EPSC2018-1023
Processing and Calibration for the WISDOM Radar Applied to Field Measurements
Plettemeier Dirk, Statz Christoph, Lu Yun, Benedix Wolf-Stefan, Ciarletti Valérie, Le Gall Alice, Corbel Charlotte, Hervé Yann

P143: EPSC2018-1116
Applications of the ExoMars 2020 PanCam Wide Angle Camera Simulator: Optimising Image Acquisition and Post-Processing
Stabbins Roger, Griffiths Andrew, Gunn Matthew, Coates Andrew, Science Team the PanCam

P144: EPSC2018-859
Spectral characterization of the Ma_MISS instrument on board the ExoMars 2020 rover
Ferrari Marco, De Angelis Simone, De Sanctis Maria Cristina, Altieri Francesca, Ammannito Eleonora, Tinelli Paola, Biondi David, Mugnolo Raffaele, Pirrotta Simone

P145: EPSC2018-1132
RLS FM performance characterization and calibration campaign with the Instrument Data Analysis Tool (IDAT)
Lopez-Reyes Guillermo, Saiz Jesus, Guzman Alvaro, Moral Andoni, Perez Carlos, Rull Fernando, Manrique Jose Antonio, Medina Jesus

P146: EPSC2018-837
Spectrometer ISEM for ExoMars-2020 space mission: from qualification prototype to flight model
Dobrolen'ks'k Yury, Korabliev Oleg, Fedorova Anna, Mantsevich Sergey, Kalinnikov Yury, Vyzovetskiy Nikita, Ivanov Yury, Syniavs'kyi Ivan, Titov Andrey, Stepanov Alexander, Sappir Alexander, Evdokimova Nadezda, Kuzmin Ruslan

P147: EPSC2018-31
LaRa (Lander Radioscience) on the ExoMars 2020 Surface Platform
Dehant Véronique, Le Maistre Sébastien, Baland Rose-Marie, Karatekin Ozgur, Mitrovic Michel, Peters Marie-Julie, Rivoldini Attilio, Van Hoolst Tim, Van Hove Bart, Yseboodt Marie

P148: EPSC2018-1159
The characterization of airborne dust close to the surface of Mars: the Dust Complex/MicroMED sensor on board the ExoMars 2020 Surface Platform
Esposito Francesca, Molfeese Cesare, Cozzolino Fabio, Corteccia Fausto, Mongelluzzo Giuseppe, Saggini Bortolin, Scaccabarozzi Diego, Arruoe Rodriguez Ignacio, Martin Ortega Rico Alberto, Andrés Santiuste Nuria, Ramón de Mingo José, Schipani Pietro, Silvestro Simone, Ionut Popa Ciprian, Dall’Ora Massimo, Zakharov Alexander, Dolnikov Gennady, Lyash Andrew, Kuznetsov Ilya, Mugnulo Raffaele and the Micromed team

P149: EPSC2018-725
Status of METEO-P and METEO-H humidity device development for the ExoMars 2020 mission
Nikkanen Timo, Genzer Maria, Hietala Maria, Meskanen Matias, Harri Ari-Matti, Polkkio Jouni

P150: EPSC2018-743
Electromagnetic wave analyzer module for the ExoMars 2020 surface platform
Santolik Ondrej, Kolmasova Ivana, Skalsky Aleksander

P151: EPSC2018-686
"Lucky Strike": A terrestrial analog for hydrothermal fields on ancient Mars with implications for the ExoMars rover
Ruesch Ottaviano, Vago Jorge, L., Barreyre Thibaut
P152: EPSC2018-1138
Low Temperature Phase Transition in Natural Gypsum: Relevance in Exomars Mission
Casado Ana Isabel, Rodríguez Montoro Óscar, Taravillo Mercedes, Baonza Valentín G., Lobato Alvaro

P153: EPSC2018-353
Meteorites as Environmental Witness Plates for Mars Sample Return Consideration
Tait Alastair, Schroeder Christian, Ashley James, Velbel Micheal, Boston Penelope, Carrier Brandi, Cohen Barbara, Bland Phill

P154: EPSC2018-971
Terrestrial validation of geological analyses in PRo3D using an emulator for the ExoMars 2020 PanCam
Barnes Robert, Gunn Matt, Gupta Sanjeev, Paar Gerhard, Traxler Christoph, Bauer Arnold, Nausschnegg Bernhard, Ortner Thomas, Perucha-Caballo Maria Pilar

P155: EPSC2018-988
Formation of titanium oxide (TiO₂) polymorphs in an emerged submarine volcano environment: Implications for Mars
Madariaga Juan Manuel, Ruiz-Galende Patricia, Torre-Fernandez Imanol, Aramendia Julene, Gomez-Nubla Leticia, Castro Kepa, Arana Gorka

P156: EPSC2018-147
Mars INteractive Exploration based on Reconstruction and Visual Analysis: The MINERVA Concept
Paar Gerhard, Caballo Piluca, Traxler Christoph, Piringer Harald, Treibnig Gerhard, Schindler Fabian

END OF POSTER PROGRAMME TP4

TP8/OPS11/MD5/SB23 Volcanism and tectonism across the Solar system (co-organized)

Convener: Petr Broz
Co-conveners: Paul Byrne; Ernst Hauber; Vera Assis Fernandes; Nicolle Zellner; Clive Neal
Chairperson: Vera Assis Fernandes
Attendance time: Wednesday, 16:15–18:00

P164: EPSC2018-106
Evolution of the lunar basaltic magmatism: Basins and Marea covers
Kochemasov Gennady G.

P165: EPSC2018-243
Preliminary petrographic characterization, 40Ar/39Ar and CRE ages of Apollo 15 regolith basaltic fragments
Assis Fernandes Vera, Czaja Peter, Fawcett Lydia

P166: EPSC2018-384
The Idunn Mons-Olapa Chasma system as the candidate site for studying ongoing volcanotectonic activity on Venus
D’Incecco Piero, López Ivan, Komjathy Attila, Cutts James A., Krishnamoorthy Siddharth

P167: EPSC2018-48
Asthenospheres of the rocky planets and the Moon: a reason of their origin
Kochemasov Gennady G.

P168: EPSC2018-852
Spectral properties of pyroclastic deposits on Mercury and the Moon
Besse Sebastien, Doressoundiram Alain, Barraud Oceane, Cornet Thomas, Munoz Claudio

P169: EPSC2018-377
Geological Characteristics of Von Kármán Crater, Northwestern South Pole-Aitken Basin: ChangE-4 Landing Site Region
Huang Jun

P170: EPSC2018-1161
Extensive Volcanic Resurfacing within the South Pole - Aitken Basin
Moriarty Daniel, Petro Noah

P171: EPSC2018-54
Analyzing pit chains in Iceland to constrain regolith thickness on Enceladus
Whitten Jennifer, Martin Emily

P172: EPSC2018-577
Evolution of tectonics of Enceladus
Czechowski Leszek

P173: EPSC2018-197
Mapping of regional C-C'-S shear zones on the floor of Valles Marineris troughs
Mege Daniel, Gurgurewicz Joanna

P174: EPSC2018-739
Nature of cone distribution at aureole of Olympus Mons, Mars
Parekh Rutu

END OF POSTER PROGRAMME TP8/OPS11/MD5/SB23
Terrestrial Planets

TP4 ExoMars - First results from the TGO and plans for the 2020 Rover and Surface Platform

**Convener:** Håkan Svedhem  
**Co-conveners:** Maurizio Pajola; Manish R. Patel; Daniel Rodionov; Jorge Vago  
**Lecture Room:** Jupiter

**Chairperson:** D. Rodionov

08:30–10:15

**08:30–08:45:** EPSC2018-223  
Thermal structure and aerosol content in the martian atmosphere from ACS-TIRVIM onboard ExoMars/TGO  
Guérlet Sandrine, Ignatiev Nikolay, Fouchet Thierry, Forget François, Millour Ehouarn, Young Roland, Montabone Luca, Grigoriev Alexey, Trokhimovskiy Alexander, Montmessin Franck, Korablev Oleg

**Related Results and Studies**

08:45–09:00:** EPSC2018-264  
Recent results for the space radiation environment aboard ExoMars TGO provided by FREND’S Liulin-MO dosimeter  
Semkova Jordanka and the Team Liulin-MO-FREND

09:00–09:15:** EPSC2018-1236  
The CaSSIS Digital Terrain Model generation and Archiving at OAPD  
Cremonese Gabriele, Re Cristina Re

09:15–09:30:** EPSC2018-1069  
Martian winds could drive seasonal methane variations observed by MSL-SAM: implications for TGO observations  
Pla-Garcia Jorge, Rafkin Scot

09:30–09:45:** EPSC2018-1109  
TGO limb observations and additional possibilities for upper atmosphere science on Mars  
Lopez-Valverde Miguel Angel, Gerard Jean-Claude, González-Galindo Francisco, Vandaële Ann Carine, Korablev Oleg

**Rover and Surface Platform mission**

09:45–10:00:** EPSC2018-813  
The Exomars 2020 mission and the search for chemotrophic biosignatures  
Westall Frances, Vago Jorge, Bridges John, Hickman-Lewis Keyron, Foucher Frédéric, Cavalazzi Barbara, Gautret Pascale, Campbell Kathy, Cockell Charles

10:00–10:15:** EPSC2018-934  
The Ancient Fluvial Catchment of the Candidate ExoMars 2020 Rover Landing Site in the Oxia Planum Basin  
Fawdon Peter

10:15 Coffee break

10:45–12:30

**Chairperson:** J. L. Vago

10:45–11:00:** EPSC2018-732  
ExoMars-2020 Surface Platform scientific investigation  
Rodionov Daniel, Zelenyi Lev, Korablev Oleg, Chuklov Ilya, Vago Jorge

11:00–11:15:** EPSC2018-1117  
ExoMars 2020 is Blossoming: Integration and Test is Underway  
Haldemann Albert, Baglioni Pietro, Blanchquaet Thierry, Gianfiglio Giacinto, Kasper Michael, Spoto Francois, Vago Jorge

11:15–11:30:** EPSC2018-175  
The PanCam instrument for the ExoMars 2020 rover  
Coates Andrew and the ExoMars 2020 PanCam

11:30–11:45:** EPSC2018-1002  
The radar WISDOM for the ExoMars rover mission - Interpretation of the polarimetric data and contribution to the operations  
Clarletti Valerie, plettemeier Dirk, Hervé Yann, Le Gall Alice, Benedix Wolf-Stefan, Lu Yun

11:45–12:00:** EPSC2018-922  
The Raman Laser Spectrometer (RLS) for 2020 Exomars (ESA) Mission: Instrument development and operation on Mars  
Ruill Fernando, Maurice Sylvestre, Ian Hutchinson, Moral Andoni G., Perez Carlos, Belenguer Tomas, Ramos Gonzalo, Colombo Maria, Lopez-Reyes Guillermo, Garcia Valentin, Forni Olivier, Popp Juergen, Medina Jesus

12:00–12:15:** EPSC2018-643  
MA_MISS: a miniaturized spectrometer on the ExoMars Drill System  
De Santis M. Cristina, Attieri Francesca, Ammannito Eleonora, Biondi David, De Angelis Simone, Ferrarri Marco, Tinivelli Paola, Muguñulo Raffaele, Pirrotta Simone

12:15–12:30:** EPSC2018-1148  
CLUPI, a high-performance imaging system on the rover of the ExoMars mission 2020 to discover biofabrics on Mars. Science objectives and development status.  
Josset Jean-Luc and the CLUPI Team

END OF ORAL PROGRAMME TP4
Lunar Science and Exploration

LSE4 Nine Years of Exploration with Lunar Reconnaissance Orbiter (LRO)

Convener: Mark Robinson
Co-conveners: Stephanie C. Werner; Harald Hiesinger
Lecture Room: Mars

08:30–10:15
Chairperson: Jaclyn D. Clark

08:30–08:45: EPSC2018-473
Moon South Pole Mapping by LEND Instrument
Sanin Anton, Mitrofanov Igor, Litvak Maxim, Bakhtin Boris, Boynton William, Chin Gordon, Harshman Karl, Golovin Dmitry, Kozyrev Alexander, Livengood Timothy, Malakhov Alexey, McClanahan Timothy, Mukrosov Maxim, Starr Richard, Sagdeev Roald, Tret'yakov Vladislav

08:45–09:00: EPSC2018-575
Reviewing the contribution of GRAIL to lunar science and planetary missions
Zuber Maria T, Smith David E

09:00–09:15: EPSC2018-583
LROC: Nine Years Exploring the Moon
Robinson Mark

09:15–09:30: EPSC2018-388
Diviner Lunar Radiometer Highlights from the LRO Cornerstone Mission
Greenhagen Benjamin, Paige David and the Diviner Lunar Radiometer Science Team

09:30–09:45: EPSC2018-603
The Distribution of Antipodal Ejecta from the Tycho Impact: Observations and Models
Paige David A., Curren Ivy, Russell Patrick, Moon Seulgi, Boyd Aaron

09:45–10:00: EPSC2018-492
Far-Ultraviolet Investigation of New Impact Craters and Cold Spots on the Moon Using the LRO LAMP Data
Liu Yang, Retherford Kurt, Greathouse Tommy, Mandt Kathy, Cahill Joshua, Hendrix Amanda, Raut Ujwal, Grava Cesare, Byron Ben, Magana Lizeth, Egan Anthony

10:00–10:15: EPSC2018-482
Investigation Recent Impacts with Temporal Image Pairs and Photometric Sequences
Speyerer Emerson, Wagner Robert, Povilaitis Reinhold, Boyd Aaron, Robinson Mark, Denevi Brett

10:15 Coffee break

10:45–12:20
Chairperson: A. Mura

10:45–11:00: EPSC2018-748
Geologic Evidence for an Impact Ejecta Origin of Tycho's Antipode Terrain
Curren Ivy, Paige David, Russell Patrick, Moon Seulgi

11:00–11:15: EPSC2018-629
Investigating the Mandel'shtam lobate scarp complex
Clark Jaclyn D., van der Bogert Carolyn H., Hiesinger Harald, Walters Thomas R., Banks Maria E.

11:15–11:30: EPSC2018-1286
LROC Narrow Angle Camera Photometric Analysis of Crustal Lithologies: Pure Anorthosite Locales
(solicited talk)
Jolliff Brad, Watkins Ryan, Schonwald Anna, Hahn Timothy and the LROC Science Team

11:30–11:45: EPSC2018-255
A novel data processing technique for detection of deep subsurface echoes of lunar maria by Kaguya Lunar Radar Sounder
Kobayashi Takao, Lee Seung Ryol, Song Kyo-Yeong

11:45–12:00: EPSC2018-1208
South Pole-Aitken basin: outcrops and volcanic structures
Rommel Daniela

12:00–12:15: EPSC2018-646
Integrating Near and Thermal Infrared Data to Search for Lunar Mantle
Klima Rachel, Bretzfelder Jordan, Buczkowski Debra, Greenhagen Ben, Petro Noah

12:15–12:30: Questions & Discussions

END OF ORAL PROGRAMME LSE4

Outer Planet Systems

OPS4 Juno at Jupiter and Supporting Earth-Based Observations

Convener: Scott Bolton
Co-conveners: Alberto Adriani; Jack Connerney; Tristan Guillot; Alessandro Mura
Lecture Room: Saturn

10:45–12:20
Chairperson: A. Mura

Introduction

10:45–11:05: EPSC2018-447
The New Jupiter as Revealed by Juno
Bolton Scott, Connerney Jack, Levin Steve

Magnetosphere

11:05–11:20: EPSC2018-114
Electron and ion particle acceleration regimes observed by Juno over Jupiter's main aurora (solicited talk)
Mauk Barry, Haggerty Dennis, Paranicas Chris, Clark George, Kollmann Peter, Rymer Abigail, Bolton Scott, Levin Steven, Adriani Alberto, Allegrini Frederic, Bagenan Fran, Bonfond Bertrand, Connerney John, Ebert Robert, Elliott Sadie, Gladstone Randy, Kurth William, McComas Dave, Ranquist Drake, Valek Phil
11:20–11:35: EPSC2018-188
Juno Maps Jupiter’s Planetary Magnetic Field
(solicited talk)
**Connerney Jack**, Oliversen Ronald, Espley Jared, Gershman Daniel, Kotsiaros Stavros, Martos Yasmina, Joergensen John, Joergensen Peter, Merayo Jose, Denver Treolz, Benn Mathias, Bloxham Jeremy, Moore Kimberley, Bolton Scott, Levin Steven

11:35–11:50: EPSC2018-160
Observations of Jupiter by the Juno Ultraviolet Spectrograph (Juno-UVS) (solicited talk)
**Greathouse Thomas**, Gladstone G. Randall, Hue Vincent, Versteeg Maarten, Bonfond Bertrand, Davis Michael, Grodent Denis, Gérard Jean-Claude, Kammer Joshua, Bolton Scott, Levin Steven, Connerney John

11:50–12:05: EPSC2018-556
Jupiter's magnetic field morphology: Implications for the dynamo
**Moore Kimberly**, Yadav Rakesh, Kulowski Laura, Cao Hao, Bloxham Jeremy, Connerney John, Kotsiaros Stavros, Jorgensen John, Merayo Jose, Stevenson David, Bolton Scott, Levin Steven

12:05–12:20: EPSC2018-395
Juno Waves observations at Jupiter (solicited talk)

12:20 Lunch break

14:00–14:15: EPSC2018-458
Energetic proton and heavy ion observations over Jupiter’s main auroral and polar cap regions
**Clark George**, Mauk Barry, Haggerty Dennis, Kollmann Peter, Parancias Chris, Rymer Abi, Mitchell Don, Allegrini Frederic, Ebert Robert, Hospodarsky George, Kurth Bill, Saur Joachim, Valek Phil, Bolton Scott, Connerney Jack, Levin Steve

14:15–14:30: EPSC2018-494
Jupiter’s magnetic field & Io-related decameter radiation
**Martos Yasmina M**, Connerney Jack, Kotsiaros Stavros, Imai Masafumi

14:30–14:45: EPSC2018-617
Field aligned currents associated with Jupiter’s auroras
**Kotsiaros Stavros**, Connerney John, Gladstone Randal, Kurth William, Clark George, Allegrini Frederic, Mauk Barry, Greathouse Thomas, Bunce Emma, Martos Yasmina, Bolton Scott, Levin Steven

14:45–15:00: EPSC2018-666
Juno/JIRAM infrared observations of Jupiter: results of the first two years (solicited talk)
**Mura Alessandro**, Adriani Alberto, Bolton Scott, Connerney Jack and the JIRAM Team

15:00–15:15: EPSC2018-1185
Unveiling Jupiter interior with Juno
**Miguel Yamila**, Guillot Tristan

15:15–15:30: EPSC2018-990
Probing Jupiter’s interior with Juno: Linking atmosphere and interior
**Guillot Tristan**

15:30–15:45: EPSC2018-72
Jupiter’s evolution with primordial composition gradients
**Helled Ravit**, Vazan Aliona, Guillot Tristan

15:45 Coffee break

16:15–18:00
Chairperson: T. Guillot

16:15–16:30: EPSC2018-977
Juno’s sensitivity to the gravitational signature of Jupiter’s meridional flows
**Durante Daniele**, Notaro Virginia, Racioppa Paolo, Galanti Eli, Kaspi Yohai, Iess Luciano

16:30–16:45: EPSC2018-263
How deep is the Great Red Spot? Determining the depth of the GRS with the Juno gravity measurements
**Galanti Eli**, Kaspi Yohai, Parisi Marzia, Folkner William

17:00–17:15: EPSC2018-433
First measurements of the Jovian zonal winds profile through visible Doppler spectroscopy

17:15–17:30: EPSC2018-559
Jupiter’s high-latitude hazes as mapped by JunoCam
**Rogets John**, Eichstädt Gerald, Hansen Candice, Orton Glenn, Momary Tom, Tabataba-Vakili Fachreddin, Caplingier Michael, Ravine Michael, Go Christopher, Casely Andy, Jacquesson Michel

17:30–17:45: EPSC2018-700
Properties of lightning whistlers observed in the topside ionosphere of Jupiter
17:45–18:00: EPSC2018-843
JunoCam Imaging Jupiter through PJ14
Ravine Michael, Hansen Candy, Orton Glenn, Thepenier Chloé, Moomy Thomas, Caplinger Michael, Atreya Sushil, Ingersoll Andrew, Bolton Scott, Tabataba-Vakili Fachreddin, Rogers John, Eichstädt Gerald

END OF ORAL PROGRAMME OPS4

Modelling and Database

MD3/TP13/OPS13 Multi-disciplinary approaches to investigate the shape, rotation, tides, interior structure and evolution of planets and moons (co-organized)

Convener: Sebastiano Padovan
Co-conveners: Alexander Stark; Britney Schmidt; Krista Soderlund; Thomas Ruedas; Nicola Tosi; Lena Noack; Jürgen Oberst; Rose-Marie Baland; Dominik Dirkx; Gabriele Cremonese; Antoine Rozel; Ruth Ziethe
Lecture Room: Uranus

14:00–15:30
Chairperson: Sebastiano Padovan

14:00–14:15: EPSC2018-825
Compositional Fractionation of Terrestrial Magma Oceans
Ballmer Maxim, Caracas Razvan, Bolrao Daniela, Hirose Kei

14:15–14:30: EPSC2018-215
Inferences on the mantle viscosity structure and the post-overtturn evolutionary state of Venus (solicited talk)
Rolf Tobias, Steinberger Bernhard, Werner Stephanie, Sruthi Uppalapati

14:30–14:45: EPSC2018-856
Tidal response of Venus-like planets: Interior structure, composition and rotational evolution (solicited talk)
Dumoulin Caroline, Belmont Emeline, Tobie Gabriel, Verhoeven Olivier, Rosenblatt Pascal, Rambaux Nicolas

14:45–15:00: EPSC2018-935
Non-gravitational Force Modeling For Magellan Orbit Determination
Inamdar Jayraj, Bertone Stefano, Girardin Valere, Arnold Daniel, Jaeggi Adrian

15:00–15:15: EPSC2018-1183
Interior structure models and fluid Love numbers of exoplanets in the super-Earth regime
Kellermann Clemens, Becker Andreas, Redmer Ronald

15:15–15:30: EPSC2018-221
Combined retrieval of the lunar body tide and a global topographic grid from LOLA data
Thor Robin, Kallenbach Reinald, Gläser Philipp, Stark Alexander, Christensen Ulrich, Oberst Jürgen

15:30 Coffee break

16:15–17:45
Chairperson: Alexander Stark

16:15–16:30: EPSC2018-1275
Scaling and onset of thermal convection in a rotating fast spherical layer
Starchenko Sergey, Kotelnikova Maria

16:30–16:45: EPSC2018-892
Precession of a spherical shells : application to the lunar core
Laguerre Raphael, Cébron David, Noir Jérôme, Schaeffer Nathanel

16:45–17:00: EPSC2018-864
Long-period deformations in Enceladus’s ice shell (solicited talk)
Behounkova Marie, Soucek Ondrej, Cadek Ondrej, Hron Jaroslav, Tobie Gabriel, Choblet Gael

17:00–17:15: EPSC2018-1242
Planetary seismology reborn: Prospects for exploring interiors on Mars, icy ocean worlds and beyond (solicited talk)
Panning Mark P., Stähler Simon, Vance Steven, Kedar Sharon

17:15–17:30: EPSC2018-897
The Thermal State and Interior Structure of Mars as Predicted from 3D Thermal Evolution Models
Plesa Ana-Catalina, Padovan Sebastiano, Tosi Nicola, Breuer Doris, Grott Matthias, Wieczorek Mark A., Spohn Tilman, Smrekar Suzanne E., Banerdt William B.

17:30–17:45: EPSC2018-1100
Measurements of Mars rotational parameters by co-registration of Mars Orbiter Laser Altimeter (MOLA) profiles to Digital Terrain Models
Annibali Serena, Stark Alexander, Xiao Haifeng, Oberst Juergen

END OF ORAL PROGRAMME MD3/TP13/OPS13

Missions, Techniques and Industry

MTI6 Deep-Space SmallSats mission concepts

Convener: Brook Lakew
Co-conveners: Sabrina Feldman; Andris Slavinskis
Lecture Room: Saturn

08:30–10:15
Chairpersons: Brook Lakew, Sabrina Feldman

08:30–08:45: EPSC2018-1074
NASA Small Innovative Missions For Planetary Exploration (SIMPLEx)
Daou Doris
08:45–09:00: EPSC2018-1181
ArgoMoon, a multipurpose cubesat platform for missions in Moon vicinity and orbit

Di Tana Valerio, Fiori Carlo, Simonetti Simone, Pirrotta Simone

09:00–09:15: EPSC2018-43
A minor mission to Ice Giant Neptune

Sanmartin Juan, Pelaez Jesus

09:15–09:30: EPSC2018-191
Concept of nano-probes exploration in small-body mission

Huang Jiangchuan, Guo Fan, Liao Huixi, Ma Jinan, Meng Linzhi, Wang Tong, Jia Xiaoyu

09:30–09:45: EPSC2018-320
Lunar Meteoroid Impact Observer (LUMIO): A CubeSat at Earth-Moon L2

Topputo Francesco, Avdellidou Chrysa and the LUMIO-team

09:45–10:00: EPSC2018-839
ASPECT hyperspectral imager for small interplanetary spacecrafts

Kohout Tomas, Näsilä Anti

10:00–10:15: EPSC2018-1228
Reliability of Small Satellites for Planetary Science Missions

Beauchamp Patricia, Johnson Michael, Schone Harald, Venturini Catherine

END OF ORAL PROGRAMME MT6

Exoplanets and Origins

EXO1 Observations and modelling of exoplanet atmospheres, interiors and orbits

Convener: Giovanna Tinetti
Co-conveners: Olivia Venot; Ravit Helled
Lecture Room: Neptune

14:00–14:30: EPSC2018-93
Interior characterization in multiplanetary systems: Trappist-1

Dorn Caroline, Mossegaard Klaus, Grimm Simon

14:10–14:20: EPSC2018-107
Optical indices of organic aerosols for oxidizing atmospheres of Earth-like exoplanets

Carrasco Nathalie, Gavilan Lisseth, Broch Laurent, Fleury Benjamin, Vettier Ludovic

14:20–14:30: EPSC2018-234
GAOSS: Results from 5 years of observations

Claudi Riccardo, Benatti Serena, Boccata Caterina, Covino Elvira, Desidera Silvana, Gratton Raffaele, Lanza Antonino F., Maggio Antonio, Micela Giuseppina, Molinari Emilio, Pagano Isabella, Piotto Giampamalo, Poretti Ennio, Smareglia Riccardo, Sozzetti Alessandro

14:30–14:40: EPSC2018-23
Threshold Radii for Water Worlds and Neptune-like Planets

Lozovskiy Michael, Helled Ravit, Dorn Caroline, Venturini Julia

14:40–14:50: EPSC2018-241
Effective induction heating inside exoplanets orbiting strongly magnetized M dwarfs

Kislyakova Kristina, Noack Lena, Johnstone Colijn, Fossati Luca, Lammer Helmut, Güdel Manuel

14:50–15:00: EPSC2018-244
Possible discovery of two Mini-Neptune type planets around a dim K-star

Herath Mahesh, Hinse Tobias Cornelius, Gunesekera Saraj, Jayatrame Chandana

15:00–15:10: EPSC2018-266
ExoAI: Deep learning in exoplanet spectroscopy

Waldmann Ingo, Zingales Tiziano

Impact of exomoons in flux and polarization phase curves of starlight reflected by exoplanets

Benzosa Molina Javier, Rossi Loïc, Stam Daphne

15:20–15:30: EPSC2018-391
Investigating cloud cover variability on Earth-like exoplanets using polarimetry

Rossi Loïc, Groot Ashwyn, Fauchez Thomas, Stam Daphne M.

15:30 Coffee break

16:15–17:45

16:15–16:25: EPSC2018-343
Atmospheric Retrieval using Deep Learning

Zingales Tiziano, Waldmann Ingo

16:25–16:35: EPSC2018-467
A comparison of exoplanet spectroscopic retrieval tools

Barstow Joanna, Garland Ryan, Line Michael, Rocchetto Marco, Waldmann Ingo

16:35–16:45: EPSC2018-500
SHINE, SPHERE High-contrast ImagiNg survey for Exoplanets

Langlois Maud and the Shine Team

16:45–16:55: EPSC2018-628
Detectability of Atmospheric Features of Terrestrial Planets in the Habitable Zone around M-dwarfs

Wunderlich Fabian, Godolt Mareike, Grenfell John Lee, Städte Steffen, Rauer Heike, Gebauer Stefanie, Schreier Franz, Hedelt Pascal

16:55–17:05: EPSC2018-669
New Insights into Cosmic Ray induced Biosignature Chemistry in Earth-like Atmospheres

Scheucher Markus, Grenfell Lee, Godolt Mareike, Schreier Franz, Rauer Heike

17:05–17:15: EPSC2018-782
Dynamical deviations from superrotation in hot Jupiters

Carone Ludmila, Baeyens Robin, Mollière Paul, Barth Patrick, Sarkis Paula, Decin Leen, Venot Olivia, Henning Thomas
17:15–17:25: EPSC2018-716
Mass-Radius Contribution of Sub-Neptunian Atmospheres
MacKenzie Jasmine, Baumeister Philipp, Godolt Mareike, Tosi Nicola

17:25–17:35: EPSC2018-780
Water build-up on planets orbiting M-Stars via secondary outgassing from the interior
Godolt Mareike, Stracke Barbara, Tosi Nicola, Grenfell John Lee

17:35–17:45: EPSC2018-787
Are giant planets good neighbours for habitable worlds?
Georgakarakos Nikolaos

END OF THURSDAY ORAL PROGRAMME EXO1
ORAL PROGRAMME EXO1 CONTINUES ON FRIDAY

EXO2 Formation and Dynamical Evolution of Planetary Systems

Convener: Ravit Helled
Co-convener: Yann Alibert
Lecture Room: Neptune

10:45–12:15

10:45–11:00: EPSC2018-1010
Relaxation of resonant two-planet systems and their TTVs
Mardling Rosemary

11:00–11:15: EPSC2018-1021
Enrichment of Heavy Elements in Gas Giant Planets during the Supply-Limited Accretion Phase
Shibata Sho, Ikoma Masahiro

11:15–11:30: EPSC2018-1070
Early tidal evolution of the TRAPPIST-1 system
Bolmont Emeline, Coleman Gavin, Blanco-Cuaresma Sergi

11:30–11:45: EPSC2018-1122
Second-order mean-motion resonances in a system of two low-mass planets
Szuszkiewicz Ewa, Papaloizou John, Cui Zijia

11:45–12:00: EPSC2018-426
Evolution of exoplanets in protoplanetary discs
Leleu Adrien, Coleman Gavin, Ataiee Sareh

12:00–12:15: EPSC2018-1046
Dynamical perturbations of Earth-type planets in binary star systems
Pliat-Lohinger Elke, Bázsó Ákos, Haghighipour Nader

END OF ORAL PROGRAMME EXO2

EXO4/TP14/OPS9/MD6 Matter Under Planetary Interior Conditions (co-organized)

Convener: Frank Sohl
Co-conveners: Martin French; Zuzana Konopkova; Sebastiano Padovan
Lecture Room: Neptune

08:30–10:25
Chairpersons: M. French, S. Padovan

08:30–08:50: EPSC2018-1274
Growth Model Interpretation of Planet Size Distribution (solicited talk)
Zeng Li, Jacobsen Stein B., Sasselov Dimitar D., Vanderburg Andrew, López-Morales Mercedes, Perez-Mercader Juan, Petaev Michail I., Mattsson Thomas R.

08:50–09:05: EPSC2018-558
Mantle mixing over time
Noack Lena, Baldwin Alexander

09:05–09:20: EPSC2018-678
Effects of different equations of state on the interior structure of exoplanets
Baumeister Philipp, MacKenzie Jasmine, Tosi Nicola, Godolt Mareike

09:20–09:50: EPSC2018-487
Light elements in planetary cores: a review (solicited talk)
Morard Guillaume

09:50–10:05: EPSC2018-541
An experimental approach to investigate carbon rich exoplanet interior
Miozzi Francesca, Morard Guillaume, Antonangi Daniele, Clark Alisha Nicole, Dorn Caroline, Antoine Rozel, Mezouar Mohamed, Baron Marzena Anna, Pakhomova Anna, Fiquet Guillaume

Ab-initio studies of ammonia-water mixtures at icy planet mantle conditions (solicited talk)
Hermann Andreas, Naden Robinson Victor, Marques Miriam, Christiansen Jacob, Wang Yanchao, Ma Yanning

END OF ORAL PROGRAMME EXO4/TP14/OPS9/MD6
Small Bodies (comets, KBOs, rings, asteroids, meteorites, dust)

SB3 The Martian Moons - current knowledge and future exploration

Convener: Konrad Willner
Co-conveners: Masaki Fujimoto; Stephan Ulamec
Lecture Room: Saturn

16:15–17:45
Chairpersons: K. Willner / S. Ulamec

16:15–16:30: EPSC2018-1036
Martian Moons eXploration (MMX): an overview of its science
Kuramoto Kiyoshi, Kakawatsu Yasuhiro, Fujimoto Masayuki and the MMX international Science Board

16:30–16:45: EPSC2018-567
DRAGON: the Deimos Reconnaissance And Geological ObservatiON CubeSat
Thangavelautham Jekan, Asphaug Erik

16:45–17:00: EPSC2018-159
Spectral modeling (0.5–2.5 μm) of the Phobos Blue-Red transition area
Pajola Maurizio, Roush Ted, Dalle Ore Cristina, Marzo Giuseppe, Simioni Emanuele

17:00–17:15: EPSC2018-880
Spectral and Thermophysical characterization of a Phobos regolith simulant for MMX mission
Maturilli Alessandro, Miyamoto Hirdy, Niihara Takafumi, Grott Matthias, Knollenberg Jörg, Helbert Jörn, Sakatani Naoya, Ogawa Kazunori

17:15–17:30: EPSC2018-545
Illumination Conditions in Phobos’ Polar Areas
Ziese Ramona, Willner Konrad, Oberst Jürgen

17:30–17:45: EPSC2018-758
Equipotential surfaces and geodetic implications on formation of Martian moons
Hu Xuanyu, Oberst Jürgen, Willner Konrad

END OF ORAL PROGRAMME SB3

SB7 KBOs and Centaurs

Convener: Davide Perna
Co-conveners: Maria Teresa Capria; Sonia Fornasier; Olivier Hainaut; Michele Bannister; Karen Meech; Alan Fitzsimmons
Lecture Room: Saturn

14:00–15:45
Chairpersons: Davide Perna, Olivier Hainaut

14:00–14:10: EPSC2018-598
The Trojan Color Conundrum
Jewitt David

14:10–14:20: EPSC2018-526
Jupiter Trojan’s shallow subsurface: direct observations by radar on board OKEANOS mission
Herique Alain, Beck Pierre, Michel Patrick, Kofman Wlodek, Kumamoto Atsushi, Okada Tatsuaki, Plettemeier Dirk

14:20–14:30: EPSC2018-1263
2013 ULI01: the first very red active Centaur
Mazzotta Epifani Elena, Dotto Elisabetta, Ieva Simone, Perna Davide, Palumbo Pasquale, Micheli Marco, Perozzi Ettore

14:30–14:40: EPSC2018-363
Close encounters and collisions of Centaurs with terrestrial planets
Galiazzo Mattia, Silber Elizabeth, Dvorak Rudolf

14:40–14:50: EPSC2018-821
Chariklo’s body and ring system: three multi-chord stellar occultations in 2017
Desmars Josselin, Bérand Diane, Sicardy Bruno, Meza Erick, Leiva Rodrigo, Colas François, Maquet Lucie, Bath Karl-Ludwig, Beisler Wolfgang, Kretlow Mike, Dauvergne Jean-Luc, Assafin Marcelo, Benedetti-Rossi Gustavo, Braga-Ribas Felipe, Camargo Julio, Vieira-Martins Roberto, Duffard Rene, Ortiz Jose Luis, Santos-Sanz Pablo

14:50–15:00: EPSC2018-76
Ortiz Jose L., Santos-Sanz Pablo, Sicardy Bruno, Benedetti-Rossi Guga and the 2002TC302 collaboration

15:00–15:10: EPSC2018-793
Search for sub-kilometre sized trans-Neptunian objects using MIOSETYS observations
Liu Chih-Yuan, Doressoundiram Alain, Roques Françoise, Chang Hsiang-Kuang, Maquet Lucie

11/2017 U1 (‘Oumuamua), a Portrait
Hainaut Olivier R., Meech Karen J., Micheli Marco, Belton Michael S. J.

15:20–15:30: EPSC2018-1118
Detailed photometric characterization of ‘Oumuamua with Gemini North
Drahus Michal, Guzik Piotr, Waniak Waclaw, Handzlik Barbara, Kurowski Sebastian, Xu Siyi

15:30–15:40: EPSC2018-1103
11/‘Oumuamua - probably too small to ever be an active comet
Guzik Piotr, Drahus Michal

15:40–15:45: Discussion

END OF ORAL PROGRAMME SB7
SB8/AB4 Comets after Rosetta - what do we know and what are the new questions (co-organized)

Convener: Matthew Taylor
Co-conveners: Maria Teresa Capria; Bonnie Buratti; Mathieu Choukroun
Lecture Room: Venus

16:15–18:00

16:15–16:30: EPSC2018-17
Oxygen isotopes in water in the coma of Comet 67P/Churyumov-Gerasimenko as measured with the Rosetta / ROSINA double focusing mass spectrometer
Schroeder Isaac and the ROSINA team

16:30–16:45: EPSC2018-129
A ROSINA perspective on the organics in Comet 67P/Churyumov-Gerasimenko

16:45–17:00: EPSC2018-182
Modelling the trapping of noble gases in comet ices
Pauzat Françoise, Ellinger Yves, Ouzgurel Ozge, Dororin Mikhail, Mousis Olivier

17:00–17:15: EPSC2018-515
Gas production of comet 67P/Churyumov-Gerasimenko reconstructed from DFMS/COPS data
Läuter Matthias, Kramer Tobias, Rubin Martin, Altwegg Kathrin

17:15–17:30: EPSC2018-256
New constraints on the chemical composition and outgassing of 67P/Churyumov-Gerasimenko
Henri Clémence, Mousis Olivier, Marschall Raphael, Thomas Nicolas, Rubin Martin, Wright Ian

17:30–17:45: EPSC2018-115
Modelling the inner coma of comet 67P/Churyumov-Gerasimenko
Kramer Tobias, Laeuter Matthias

17:45–18:00: EPSC2018-296
The inner coma of 67P/Churyumov-Gerasimenko as seen from OSIRIS and VIRTIS on board Rosetta
Tubiana Cecilia, Rinaldi Giovanna, Gütler Carsten, Hu Xuanyu, Shi Xian, La Forgia Fiorangelo, Bockelee-Morvan Dominique, Capaccioni Fabrizio, Ciarniello Mauro, Erard Stephan, Filacchione Gianrico, Formisano Michelangelo, Leyrat Cedric, Longobardo Andrea, Raponi Andrea, Sierks Holger, Tozzi Gian Paolo and the OSIRIS and VIRTIS teams

END OF THURSDAY ORAL PROGRAMME SB8/AB4
ORAL PROGRAMME SB8/AB4 CONTINUES ON FRIDAY

SB15 Interpretation of observational data using spectro-polarimetric techniques

Convener: Karri Muinonen
Co-conveners: Maria Gritsevich; Alberto Cellino
Lecture Room: Mars

14:00–15:45
Chairperson: Karri Muinonen

14:00–14:30: EPSC2018-730
Phase angle effects in brightness and polarization for different classes of small solar system bodies (solicited talk)
Belskaya Irina, Shevchenko Vasilij

14:30–15:00: EPSC2018-836
First steps towards a database of polarisation spectra of asteroids (solicited talk)
Bagnulo Stefano, Cellino Alberto, Borisov Galin, Christou Apostolos, Stam Daphne, Belskaya Irina, Sterzik Michael, Muinonen Karri

15:00–15:15: EPSC2018-761
Asteroid photometric phase curves from Gaia observations
Muinonen Karri, Gritsevich Maria, Cellino Alberto

15:15–15:30: EPSC2018-572
The Mission Accessible Near-Earth Objects Survey (MANOS): first results from the visible spectroscopic survey
Devogele Maxime, Moskovitz Nicholas, Thomas Cristina, Thirouin Audrey, Momment Michael, Polishook David, Skiff Brian, Magnuson Mitchell, Gustafsson Annika

15:30–15:45: EPSC2018-1120
Asteroid taxonomy with limited spectral ranges
Penttilä Antti

15:45 Coffee break

16:15–18:00
Chairperson: Antti Penttilä

16:15–16:45: EPSC2018-762
Wavelength-dependent multiple scattering modeling for planetary regoliths (solicited talk)
Markkanen Johannes, Väisänen Timo, Agarwal Jessica, Penttilä Antti, Muinonen Karri

16:45–17:00: EPSC2018-1037
Light scattering from densely packed irregular particle clusters in the geometric optics regime using inhomogeneous waves
Väisänen Timo, Markkanen Johannes, Martikainen Julia, Lindqvist Hannakaisa, Muinonen Karri

17:00–17:15: EPSC2018-1269
Validation of light scattering models with advanced 4? scatterometry
Gritsevich Maria, Penttilä Antti, Maconi Göran, Helander Petteri, Kassamakov Ivan, Martikainen Julia, Markkanen Johannes, Väisänen Timo, Blum Jürgen, Puranen Tuomas, Salmi Ari, Hæggström Edward, Muinonen Karri
**Thursday – Oral programme**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
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</thead>
<tbody>
<tr>
<td>17:15–17:30</td>
<td>EPSC2018-1016</td>
<td>Linear polarisation of comets observed with STEREO</td>
<td>Nezic Rok, Bagnulo Stefano, Jones Geraint H., Borisov Galin</td>
</tr>
<tr>
<td>17:45–18:00</td>
<td>EPSC2018-251</td>
<td>(3200) Phaethon: asteroid or comet?</td>
<td>Cellino Alberto, De Vogele Maxime, Belskaya Irina, Bagnulo Stefano, Bendjoua Philippe and the Alberto Cellino</td>
</tr>
<tr>
<td>09:30–09:45</td>
<td>EPSC2018-301</td>
<td>The Azorean fumarolic fields as an analog for Mars</td>
<td>Fiahat Jessica, Viveiros Fatima, Silva Catrina, Rennie Vincent, Cruz Jose, Moreno Lucia, Freire Pedro, Minin Mikhail, Olsson-Francis Karen, Rossi Angelo</td>
</tr>
<tr>
<td>09:45–10:00</td>
<td>EPSC2018-381</td>
<td>Discovery of a hydrothermal fissure in the Danakil depression</td>
<td>Mege Daniel, Hauber Ernst, De Craen Mieke, Moors Hugo, Minet Christian</td>
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<tr>
<td>10:00</td>
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<td>Coffee break</td>
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<tr>
<td>10:45–12:15</td>
<td></td>
<td>AGPA: Integrating field Geology and Geophysics for Planetary Analogues</td>
<td>Rossi Angelo Pio, Unnithan Vikram, Torrese Patrizio, Borrmann Dorit, Nuechtert Andreas, Lauterbach Helge, Ortenzi Gianluigi, Jaehrig Tim, Sohl Frank, Pozzobon Riccardo, Sauro Francesco, Minin Mikhail</td>
</tr>
</tbody>
</table>

**Laboratory and Field Investigations**

**LFI1 Earth Analogues: state of the art and future**

**Convener:** Felipe Gómez  
**Co-conveners:** Barbara Cavalazzi; Akos Kereszturi; Gernot Groemer; Bernard Schmitt; Mohamed Ramy El-Maarry; Nikolaus J. Kuhn; Jessica Fiahat

<table>
<thead>
<tr>
<th>Time</th>
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<td>08:30–10:00</td>
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<td>08:30–08:45</td>
<td>EPSC2018-1180</td>
<td>Extremophiles from Tirez and Peña Hueca: Implications for exploring habitability of Mars and Europa</td>
<td>Thombre Rebecca, Kulkarni Priyanka, Gomez Felipe, Sivaraman Bhalamurung</td>
</tr>
<tr>
<td>08:45–09:00</td>
<td>EPSC2018-98</td>
<td>Danakil Depression Flats as Analogues for RADAR-Smooth Surfaces of Titan, Mars and Venus</td>
<td>Radebaugh Jani, Lorenz Ralph, Kerber Laura, Bandeira Lourenço, Vaz David, Dame Rudger, Ori Gian</td>
</tr>
<tr>
<td>09:00–09:15</td>
<td>EPSC2018-216</td>
<td>Field work at Ojos del Salado: a new high altitude extreme Mars analogue candidate site in Atacama desert</td>
<td>Kereszturi Akos</td>
</tr>
<tr>
<td>09:15–09:30</td>
<td>EPSC2018-300</td>
<td>The ScanMars radar onboard AMADEE-18 analog mission to Mars</td>
<td>Frigeri Alessandro, Ercoli Maurizio, Pauselli Cristina, Groemer Gernot</td>
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<td>11:00–11:15</td>
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<td>11:00–11:15</td>
<td>EPSC2018-422</td>
<td>Testing Operational strategies for the Mars 2020 Helicopter using a UAV</td>
<td>El-Maarry Mohamed Ramy, Black Sarah, Hynek Brian, Yingst Aileen</td>
</tr>
<tr>
<td>11:15–11:30</td>
<td>EPSC2018-642</td>
<td>Thermal characterisation and mapping of the fumeroles on Vulcano, Italy: Potential analogues for Martian terrains</td>
<td>Unnithan Vikram, Haselback Sarah-Lynn, Stern Sönke, Sohl Frank</td>
</tr>
<tr>
<td>11:45–12:00</td>
<td>EPSC2018-1152</td>
<td>A physico-chemical and geo-microbiological study of ten different lakes located in the Danakil depression</td>
<td>Moors Hugo, De Craen Mieke</td>
</tr>
<tr>
<td>12:00–12:15</td>
<td>EPSC2018-84</td>
<td>Geomicrobiology of Rock Varnish in a natural extreme acidic environment: Río Tinto</td>
<td>Jordán-Soria José, Amils Ricardo, Gómez Felipe</td>
</tr>
</tbody>
</table>

**END OF ORAL PROGRAMME LFI1**
LFI2 The distributed planetary simulation and sample analysis facilities

Convener: Jörn Helbert
Co-conveners: Felipe Gómez; Gareth Davies
Lecture Room: Venus

14:00–15:30
Chairperson: Joern Helbert

14:00–14:15: EPSC2018-11
Dust Loading and Pressure Drop of Fibrous Filters for Atmospheric In-Situ Resource Utilisation on Mars 2020
McClean John, Merrison Jonathan, Iversen Jens, Pike William and the MOXIE science team

14:15–14:30: EPSC2018-239
Emissivity and reflectance measurements of particulate mixtures for the interpretation of planetary remote sensing data
Alemanno Giulia, Maturilli Alessandro, Helbert Joern, Galiano Anna

14:30–14:45: EPSC2018-548
CO₂ ice morphologies under Martian conditions
Portyankina Ganna, Merrison Jonathan, Iversen Jeans Jacob, Yoldi Zurine, Hansen Candice, Aye Klaus-Michael, Pommerol Antoine, Thomas Nicolas

14:45–15:00: EPSC2018-550
Temperature-dependent VNIR spectroscopy of thénardite and mirabilite
Tosi Federico, De Angelis Simone, Carli Cristian, Beck Pierre, Potin Sandra, Brissaud Olivier, Schmitt Bernard, Piccioni Giuseppe

15:00–15:15: EPSC2018-753
The Planetary Spectroscopy Laboratory (PSL)
Maturilli Alessandro, Helbert Jörn, Varatharajan Indhu, Rosas Ortiz Yaquelin, D’Amore Mario

15:15–15:30: EPSC2018-901
Spectroscopy on silicate glasses from two magmatic series: implications for planetary studies.
Pisello Alessandro, De Santis Maria Cristina, Maturilli Alessandro, Ferrari Marco, De Angelis Simone, Vetere Francesco, Pauselli Cristina, Perugini Diego

Outreach, Education and Policy

OEP2 Planetary science as an example of Science communication in society

Convener: Julie Nekola Novakova
Co-conveners: Eleni Chatzichristou; Rosa Doran
Lecture Room: Uranus

08:30–10:15
Chairperson: Eleni Chatzichristou

08:30–08:45: EPSC2018-535
Design Thinking for Space Exploration
Doran Rosa, Saraiva Jose, Tyszka Steph

08:45–09:00: EPSC2018-1212
Europlanet Evaluation Toolkit
Dewitt Jen, Bultitude Karen, Heward Anita

09:00–09:15: EPSC2018-874
Europlanet Outreach Videos, using popular science videos to reach a wider audience
Barrosa Mariana

09:15–09:30: EPSC2018-1080
Communicating Planetary Science Through Social Media
Heenatigala Thilina

09:30–09:45: EPSC2018-1261
A hard sell? Engaging UK and European politicians with space science
Massey Robert

09:45–10:00: EPSC2018-727
Mars Sample Return Outreach: Planning a Meaningful and Participatory Public Engagement Programme
Heward Anita, Klug Boonstra Sheri

10:00–10:15: Mars Sample Return Outreach: discussion

10:15 Coffee break

10:45–12:30
Chairperson: Eleni Chatzichristou

10:45–11:00: EPSC2018-119
The Age of Planetary Defense.
Daou Doris

11:00–11:15: EPSC2018-180
SVO-ast: A citizen-science project to identify NEAs and Mars crossers using the Virtual Observatory
Solano Enrique, Rodrigo Carlos, Carry Benoit, Cortés-Contreras Miriam

11:15–11:30: EPSC2018-148
The Radio Meteor Zoo: involving citizen scientists in radio meteor research
Calders Stijn, Lamy Hervé, De Keyser Johan, Verbeeck Cis, Martinez Picar Antonio, Tetard Cédric
Thursday – Oral programme

11:30–11:45: EPSC2018-3
The CESAR Education initiative
Pérez-Ayúcar Miguel, Breitfellner Michel, Castillo Fraile Manuel

11:45–12:00: EPSC2018-524
Stories of Tomorrow in Portugal: the first year
Saraiva Jose, Doran Rosa, Tyszka Steph

12:00–12:15: EPSC2018-262
The ASL (Alternanza Scuola Lavoro) program: an Italian example to bring research to school and school to research
Giacomini Livia, Postiglione Adriana, De Angelis Ilaria, Ziggiotti Marco

12:15–12:30: EPSC2018-1112
Summer Schools at Vulcano (2015–2018): A natural laboratory for marine, terrestrial and planetary science and technology
Unnithan Vikram, Sohl Frank, Thomsen Laurentz, Wilde Martina

END OF ORAL PROGRAMME OEP2
Lunar Science and Exploration

LSE4 Nine Years of Exploration with Lunar Reconnaissance Orbiter (LRO)

Convener: Mark Robinson
Co-conveners: Stephanie C. Werner; Harald Hiesinger
Chairperson: Daniela Rommel
Attendance time: Thursday, 18:15–20:00

P1: EPSC2018-638
Effects of Visible Albedo on Mid-Infrared Spectra under Simulated Lunar Environment as Compared to Diviner Lunar Radiometer
Shirley Katherine, Glotch Timothy

P2: EPSC2018-817
Lunar and Mercury morphometric crater catalogues (diameter 1-10 km)
Kozlova Natalia, Kolenkina Maria, Zharkova Anastasia, Zavyalov Igor, Kokhanov Alexander, Karachevtseva Irina

P3: EPSC2018-1127
DEM generation and rover landing at the south pole of the Moon
Feng Lang, Muller Jan-Peter

END OF POSTER PROGRAMME LSE4

Outer Planet Systems

OPS4 Juno at Jupiter and Supporting Earth-Based Observations

Convener: Scott Bolton
Co-conveners: Alberto Adriani; Jack Connerney; Tristan Guillot; Alessandro Mura
Chairperson: G. Orton
Attendance time: Thursday, 18:15–20:00

P4: EPSC2018-26
Juno and the New Renaissance
Clarke Theodore

P5: EPSC2018-463
Short-term and long-term variability of Jupiter’s auroral stratosphere
Sinclair James, Orton Glenn, Greathouse Thomas, Kasaba Yasumasa, Sato Takao, Giles Rohini, Melin Henrik, Fletcher Leigh, Moses Julianne, Irwin Patrick

P6: EPSC2018-517
Jovian broadband kilometric radio sources correlated with the ultraviolet main oval as viewed from Juno

P7: EPSC2018-1045
A possible determination of Jupiter’s frequency-dependent tides at the end of the Juno mission
Notaro Virginia, Durante Daniele, less Luciano

P8: EPSC2018-1041
Toward modeling Jupiter’s 3D shape and gravity field
Nettelmann Nadine

P9: EPSC2018-87
Cyclonic activities on Jupiter and Earth; catastrophic atmospheric phenomena of the wave nature: El-Nino, cyclon, tornado
Kochemasov Gennady G.

P10: EPSC2018-702
Long-term behavior of Jovian polar vortices from JunoCam observations
Tabataba-Vakili Fachreddin, Orton Glenn, Hansen Candice, Rogers John, Eichstädt Gerald, Momary Tom, Caplingner Mike, Ravine Mike, Bolton Scott

P11: EPSC2018-637
First hints on tropospheric composition at Jupiter’s polar regions from JIRAM-Juno data
Grassi Davide, Adriani Alberto, Mura Alessandro, Bolton Scott

P13: EPSC2018-56
Jupiter’s 2018 South Temperate Belt Disturbance: Observations and numerical modelling
Iñurrigarro Peio, Hueso Ricardo, Sánchez-Lavega Agustín, Legarreta Jon, Gómez-Forrellad Josep Maria

P14: EPSC2018-938
Constraining spatial and temporal variations in Jupiter’s vertical cloud and chromophore structure (2014-2018) with VLT/MUSE
Braude Ashwin, Irwin Patrick, Orton Glenn, Fletcher Leigh, Wittal Matthew

P15: EPSC2018-1144
Assessing quasi-periodicities in Jovian X-ray emissions: techniques and statistical survey of Chandra observations
Jackman Caltriona, Knigge Christian, Altamirano Diego, Gladstone Randy, Dunn William, Elsner Ron, Kraft Ralph, Branduardi-Raymont Graziella, Peter Ford

END OF POSTER PROGRAMME OPS4

Modelling and Database

MD4 Solar and Planetary Data system Interoperability

Convener: Baptiste Cecconi
Co-conveners: Stéphane Erard; Vincent Génot; Angelo Pio Rossi
Attendance time: Thursday, 18:15–20:00

P16: EPSC2018-125
Lunar scientific database of Chinese Chang’e missions
Zhang Zhubin, Fu Qiang, Ren Xin, Zhang Hongbo
Exoplanets and Origins

**EXO1 Observations and modelling of exoplanet atmospheres, interiors and orbits**

**Convener:** Giovanna Tinetti  
**Co-conveners:** Olivia Venot; Ravit Helled  
**Attendance time:** Thursday, 18:15–20:00

**P21: EPSC2018-681**  
Model Atmospheres for Volatile-Rich Hot Rocky Planets  
* Lupu Roxana, Fegley Bruce, Marley Mark, Lodders Katharina

**P22: EPSC2018-483**  
First results of ESA’s OGS multi-band observations of extra-solar planets  
* Heras Ana Maria, Stankov Anamarija, Rätz Stefanie, Plibliv Garian, Dubois Louis, Gocondo Philippe, Schulz Rita, Ferru Pierre, Giardino Giovanna, Isaak Kate

**P23: EPSC2018-146**  
Direct imaging of magma oceans in nearby young stellar associations  
* Bonati Irene, Lichtenberg Tim, Bower Dan J., Timpe Miles L., Quanz Sascha P.

**P24: EPSC2018-723**  
Transmission spectroscopy with the ACE-FTS infrared spectral atlas of Earth: A model validation and feasibility study  
* Schreier Franz, Städt Steffen, Hedelt Pascal, Godolt Mareike

**P25: EPSC2018-1011**  
Validation of an exoplanetary atmospheric model for high resolution spectroscopy for remote sensing  
* Shulyak Denis, Rengel Miriam, Reiners Ansgar

**P26: EPSC2018-359**  
On integrating light-curve modelling with atmospheric retrieval techniques  
* Yip Kai Hou, Waldmann Ingo, Tsiaras Angelos, Tinetti Giovanna

**P27: EPSC2018-373**  
Haze layer from reflection spectra of Titan-like exoplanets  
* Rannou Pascal, West Robert

**P28: EPSC2018-410**  
Characterizing super-Mercurys via state-of-the-art interior models  
* Brugger Bastien, Mousis Olivier, Deleuil Magali

**P29: EPSC2018-792**  
Feasibility study for a retrieval from transit spectra of Earth-like planets in the habitable zone  
* Staadt Steffen, Schreier Franz, Wunderlich Fabian, Godolt Mareike

**P30: EPSC2018-887**  
The controls of planetary bulk composition and tectonic style on the long-term evolution of outgassed atmospheres  
* Spaargaren Robert, Ballmer Maxim, Dorn Caroline, Bower Daniel, Tackley Paul

END OF POSTER PROGRAMME MD4

**EXO2 Formation and Dynamical Evolution of Planetary Systems**

**Convener:** Ravit Helled  
**Co-conveners:** Yann Alibert  
**Attendance time:** Thursday, 18:15–20:00

**P31: EPSC2018-12**  
Condensation of gas-dust particles in the dust shells of protostars and the formation of "embryos" of planets  
* Abdulmyanov Tagir

**P32: EPSC2018-282**  
On the geometry of forming encounter in two young asteroid pairs  
* Rosaev Alexei, Perpv Nikolai, Plavalova Eva

**P33: EPSC2018-328**  
Approaching Preplanetary Streaming Instabilities in Laboratory Experiments  
* Schneider Niclas, Wurm Gerhard

**P34: EPSC2018-995**  
A survey of collision outcomes during planet formation: water transport and loss  
* Maindl Thomas, Winter Philip, Pilat-Lohinger Elke, Haghighipour Nader, Schäfer Christoph, Burger Christoph, Dvorak Rudolf

**P35: EPSC2018-1128**  
Improved encounter scenario for planetary embryos - A comparison between single-star and binary-star systems  
* Pilat-Lohinger Elke, Maindl Thomas, Bancelin David, Schäfer Christoph, Bätzó Ákos
P36: EPSC2018-516
Migration of bodies to the Earth from different distances from the Sun
Ipatov Sergei

P37: EPSC2018-879
Dynamical limitations on the habitability of planets in binary star systems
Bazso Akos, Pilat-Lohinger Elke

END OF POSTER PROGRAMME EXO2

EXO3 Future instruments to detect and characterise extrasolar planets

Convener: Paul Eccleston
Co-conveners: Camilla Danielski; Enzo Pascale
Chairperson: Paul Eccleston
Attendance time: Thursday, 18:15–20:00

P38: EPSC2018-446
First Call for Proposals for the CHEOPS Guest Observers Programme
Isaak Kate

P39: EPSC2018-711
ARIELSim - the dedicated time domain simulator for the ARIEL mission.
Sarkar Subhajit, Papageorgiou Andreas, Pascale Enzo

P40: EPSC2018-961
Exoplanet Spectra-photometry with Twinkle
Edwards Billy, Rice Malena, Zingales Tiziano, Tessenyi Marcell, Waldmann Ingo, Tinetti Giovanna, Pascale Enzo, Savini Giorgio, Sarkar Subhajit

P42: EPSC2018-991
An Updated Study of the ARIEL Mission Reference Sample
Edwards Billy, Zingales Tiziano, Sarkar Subhajit, Tinetti Giovanna, Pascale Enzo

P43: EPSC2018-1013
A modular design for the ARIEL on-board electronics
Focardi Mauro, Pascale Enzo, Farina Maria, Di Giorgio Anna Maria, Pace Emanuele, Malaguti Giuseppe, Micela Giuseppina, Morgante Gianluca, Da Deppo Varia, Ferrer Colomé Joseph, Sierra-Roig Carles, Ribas Ignasi, Tenerzi Luca, Amiaux Jerome, Cara Christophe, Fredericks Martin, Middleton Kevin, Eccleston Paul

P44: EPSC2018-1017
Preparing time-critical observations of transiting exoplanets with follow-up from the ground
Tsiaras Angelos

P45: EPSC2018-1079
The primary mirror of the ARIEL mission: study and development of a prototype
Da Deppo Varia, Pace Emanuele, Morgante Gianluca, Focardi Mauro, Pascale Enzo, Malaguti Giuseppe, Terraneo Marco, Zocchi Fabio, Bianucci Giovanni, Micela Giuseppina

P46: EPSC2018-1113
Generating JWST transiting exoplanet time series data-set
Martin-Lagarde Marine, Lagarde Pierre-Olivier, Gastaud René, Coulais Alain, Cossou Christophe, Morello Giuseppe

P47: EPSC2018-1137
Atmospheric characterisation of directly imaged exoplanets with JWST/MIRI
Danielski Camilla, Baudino Jean-Loup, Lagage Pierre-Olivier, Boccaletti Anthony, Gastaud René, Bézard Bruno

P48: EPSC2018-1155
ARIEL Fine Guidance System Design
Ottenamer Roland, Rataj Miroslaw

P49: EPSC2018-1250
The EXoplanet Infrared Climate TElescope (EXCITE)
Pascale Enzo

END OF POSTER PROGRAMME EXO3

Small Bodies (comets, KBOs, rings, asteroids, meteorites, dust)

SB3 The Martian Moons - current knowledge and future exploration

Convener: Konrad Willner
Co-conveners: Masaki Fujimoto; Stephan Ulamec
Chairpersons: S. Ulamec / K. Willner
Attendance time: Thursday, 18:15–20:00

P50: EPSC2018-28
Access to Phobos data at updated version of MExLab Planetary data Geoportal
Garov Andrey, Karachevtseva Irina, Zubarev Anatoly, Nadezhdina Irina, Kozlova Natalia

P51: EPSC2018-321
Simulations of Impact Gardening on Phobos
Hurley Dana M.

P52: EPSC2018-551
Mutual Event Observations of the Martian moons by SRC on Mars Express
Willner Konrad, Ziese Ramona, Oberst Jürgen

END OF POSTER PROGRAMME SB3
SB7 KBOs and Centaurs

Convener: Davide Perna
Co-conveners: Maria Teresa Capria; Sonia Fornasier; Olivier Hainaut; Michele Bannister; Karen Meech; Alan Fitzsimmons
Chairpersons: Davide Perna, Olivier Hainaut
Attendance time: Thursday, 18:15–20:00

P53: EPSC2018-692
An extensive photometric study of the dwarf planet Makemake
Hromakina Tetiana, Belskaya Irina, Krugly Yurii, Shevchenko Vasilij, Ortiz José Luis, Santos-Sanz Pablo, Duffard Rene, Morales Nicolas, Thirouin Audrey, Inasaridze Raguli, Ayvazian Vova, Kvaratskhelia Otar, Perna Davide, Reva Inna, Serebryanskii Alexander, Rumyantsev Vasilij, Sergeyev Sergey, Molotov Igor, Voropaev Viktor, Velichko Sergey

END OF POSTER PROGRAMME SB7

SB8/AB4 Comets after Rosetta - what do we know and what are the new questions (co-organized)

Convener: Matthew Taylor
Co-conveners: Maria Teresa Capria; Bonnie Buratti; Mathieu Choukroun
Attendance time: Thursday, 18:15–20:00

P54: EPSC2018-1039
Modelling the H2O outgassing from the southern hemisphere of comet 67P/Churyumov-Gerasimenko constrained by ROSINA
Pinzón Rodríguez Olga Janeth, Marschall Raphael, Gerasimenko: dynamics of slow ejecta and landslides
Klaiber Lea, Blum Jürgen, Gundlach Bastian, Bentley Mark, Mannel Thorur

P55: EPSC2018-302
Strength of cometary particles on the nano- to micrometer scale. Force-curve analysis of MIDAS data
Klaiber Lea, Blum Jürgen, Gundlach Bastian, Bentley Mark, Mannel Thorur

P56: EPSC2018-357
The Rosetta Science Archive: Enhancing the Science Archive Content
Heather David, Barthelemy Maud, Fraga Diego, O'Rourke Laurence, Taylor Matthew

P57: EPSC2018-382
Global and Local Color Mapping of 67P/Churyumov-Gerasimenko using Rosetta-OSIRIS images
Masoumzadeh Nafiseh, Sierks Holger, Güttler Carsten, Tubiana Cecilia, Deller Jackob and the OSIRIS team

P58: EPSC2018-335
The challenge of fitting dust coma pattern in simulation images compared to Rosetta OSIRIS image data
Geras Selina-Barbara, Marschall Raphael, Pinzon Olga, Thomas Nicolas and the OSIRIS team

P59: EPSC2018-508
Activity in the Imhotep region on comet 67P/Churyumov - Gerasimenko: dynamics of slow ejecta and landslides
Czechowski Leszek, Kossacki Konrad

P60: EPSC2018-342
The change of the comet’s shape by sublimation
Vavilov Dmitrii, Medvedev Yuriu, Eggli Siegfried, Zatitskiy Pavel

P61: EPSC2018-317
The “Memory” of the Oort cloud
Fouchard Marc, Higuchi Arika, Ito Takashi, Maquet Lucie

P62: EPSC2018-428
Intense Morphological Changes in a dust bank situated at the Khonsu region of 67P/Churyumov-Gerasimenko
Hasselmann Pedro Henrique, Barucci Maria Antonietta, Fornasier Sonia, Bockelee-Morvan Dominique, Feller Clement, Deshapiyya Prasanna, Hoang Van and the OSIRIS Team

P63: EPSC2018-783
Implications of Rosetta data on cometary dust stream dynamics and their risk for interplanetary space crafts
Marschall Raphael, Jorda Laurent, Dadzie S Kokou, Hartogh Paul, Kührt Ekkehard, Rodrigo Rafael, Thomas Nicolas, Wright Ian

P64: EPSC2018-921
Experimental simulation to analyse geomorphological properties of cometary surfaces with outgassing volatiles
Haack David, Otto Katharina, Pommerol Antoine, Kührt Ekkehard, Jaumann Ralf

P65: EPSC2018-840
Thermophysical analysis of the Imhotep region
Capria Maria Teresa, Zinzi Angelo, Pajola Maurizio, Penasa Luca, Tosi Federico, Capaccioni Fabrizio, Filacchione Gianrico, Ciarniello Mauro, De Sanctis Maria Cristina, Formisano Michelangelo, Longobardo Andrea, Raponi Andrea, Oklay Nilda

P66: EPSC2018-104
On the dust properties and dynamical evolution of the near-Earth Jupiter family comet 41P/Tuttle-Giacobini-Kresak
Pozuelos Romero Francisco J., Jehin Emmanuel, Moulana Youssef, Opitom Cyrielle, Manfroid Jean, Benkhaldoun Zouhair, Gillon Michael

P67: EPSC2018-220
High resolution spectroscopy of the unusual comet C/2016 R2 (PanSTARRS)
Opitom Cyrielle, Hutsemékers Damien, Rousselot Philippe, Manfroid Jean, Jehin Emmanuel

P68: EPSC2018-298
A closed self-organizing map of Chury
Grieger Björn, Vincent Jean-Baptiste

P69: EPSC2018-1059
A revised theory of the diamagnetic cavity of comets
Nemeth Zoltan
Thursday – Poster programme 75

P70: EPSC2018-1220
Results from two unusual comets C/2016 R2 (Pan-STARRS) and C/2015 V2 (Johnson)
Venkataramani Kumar, Ganesh Shashikiran

P71: EPSC2018-1280
Comet 57P/Churyumov-Gerasimenko mass estimation from CONERT ranging data
Ye Mao, Barriot Jean-Pierre, Kofman Wlodek, Herique Alain, Rogez Yves, Li Fei, Yan Jianguo

P72: EPSC2018-156
TRAPPIST monitoring of the activity and composition of the small near-Earth Jupiter Family Comets: 41P and 252P
Moulane Youssef, Jehin Emmanuel, Pozuelos Francisco José, Opitom Cyrielle, Manfroid Jean, Benkhaldoun Zouhair, Daassou Ahmed, Gillo Michael

END OF POSTER PROGRAMME SB8/AB4

SB9 Ceres and Vesta

Convener: Francesca Zambon
Co-conveners: Wladimir Neumann; Eleonora Ammannito; Simone Ieva; Alessandra Migliorini; Daniele Fulvio
Chairperson: K. Otto
Attendance time: Thursday, 18:15–20:00

P73: EPSC2018-710
Basaltic asteroids observed with ESO/XShooter
Migliorini Alessandra, De Sanctis Maria Cristina, Lazzaro Daniela, Barbieri Mauro, Mesa Dino, Lazzarin Monica

P74: EPSC2018-972
The investigation of ridge structures in craters on dwarf planet Ceres
Jakob Clemens, Otto Katharina, Krohn Katrin, Jaumann Ralf, Preusker Frank, Roatsch Thomas, Kersten Elke, Russell Christopher T., Raymond Carol A.

P75: EPSC2018-863
Experimental Assessment of the High Reflectance Pitted Terrains on Vesta
Michalik Tanja, Otto Katharina, Jaumann Ralf, Maturilli Alessandro, Krohn Katrin, Matz Klaus-Dieter, Schröder Stefan E., Stefan Katrin

P76: EPSC2018-484
Search for water outgassing of (1) Ceres near its perihelion
Rousselot Philippe, Opitom Cyrielle, Jehin Emmanuel, Hutsemékers Damien, Manfroid Jean, Villarreal Michaela N., Li Jian-Yang, Castillo-Rogez Julie, Russell Christopher T., Vernazza Pierre, Marsset Michaël, Roth Lorenz, Dumas Christophe, Yang Bin, Mousis Olivier

P78: EPSC2018-1279
Mineral dust in the Saturnian system
Fischer Christian, Postberg Frank, Altobelli Nicolas, Nölle Lenz, Albin Thomas

END OF POSTER PROGRAMME SB10
SB11/MD7 Models of atmospheres and exospheres, surfaces, and interiors of small bodies (co-organized)

Convener: Michelangelo Formisano
Co-conveners: Andrea Raponi; Audrey Vorburger
Attendance time: Thursday, 18:15–20:00

P86: EPSC2018-779
ESA Micro-meteoroid models applied to exosphere formation of the Jovian icy moons
Lorente Rosario, Vallat Claire, Altobelli Nicolas, Schmidt Juergen, Grotheer Emmanuel, Matilainen Katja

P87: EPSC2018-267
Thermal analysis of boulders on the 67P/Churyumov-Gerasimenko comet
Cambianica Pamela, Naletto Giampiero, Cremonese Gabriele, Lucchetti Alice, Pajola Maurizio, Simioni Emanuele, Massironi Matteo, Penasa Luca, Ferrari Sabrina

P88: EPSC2018-375
Modelling a wheel in the regolith of a small body - a Project Chrono study
Klar Lennart, Murdoch Naomi, Tardivel Simon

END OF POSTER PROGRAMME SB11/MD7

SB15 Interpretation of observational data using spectro-polarimetric techniques

Convener: Karri Muinonen
Co-conveners: Maria Gritsevich; Alberto Cellino
Chairperson: Timo Väisänen
Attendance time: Thursday, 18:15–20:00

P88: EPSC2018-1259
Reflectance measurements of satellite materials
Penttilä Antti, Wilkman Olli, Lahtinen Sonja, Gritsevich Maria, Escobar-Cereo Jesús, Muinonen Karri

P90: EPSC2018-1146
Interpolating light scattering properties using spiral curve on the sphere surface
Siipola Janne, Penttilä Antti, Guanglang Xu Guanglang, Muinonen Karri

END OF POSTER PROGRAMME SB15

Laboratory and Field Investigations

LFI1 Earth Analogues: state of the art and future

Convener: Felipe Gómez
Co-conveners: Barbara Cavalazzi; Akos Kereszturi; Gernot Groemer; Bernard Schmitt; Mohamed Ramy El-Maarry; Nikolaus J. Kuhn; Jessica Flahaut
Chairperson: Akos Kereszturi
Attendance time: Thursday, 18:15–20:00

P91: EPSC2018-44
Molecular evidences of life in a poly-extreme environment in Ethiopia, the Dallol Hot Springs area, based on lipidic biomarkers
Carrizo Daniel, Sánchez-García Laura, Gómez Felipe

P92: EPSC2018-52
Analysis of Mars relevant minerals - suggestions for next missions
Kapui Zsuzsanna, Kereszturi Ákos, Kesjár Dóra, Király Csilla, Kovács Ivett, Szalai Zoltán, Zanon Vittorio

P93: EPSC2018-297
MA_MISS and WISDOM on ExoMars: building synergies through fieldwork
Frigeri Alessandro, De Sanctis Maria Cristina, Altiere Francesca, Ciarletti Valerie, Plettemeier Dirk, Ammannito Eleonora, De Angelis Simone, Herve Yann

P94: EPSC2018-466
Roughness of Surfaces in the Ethiopian Danakil from Remote Handheld Image Surveys
Dame Rudger H., Radebaugh Jani, Lorenz Ralph D., Hudson Samuel M.

P95: EPSC2018-1098
The loss of negative polarization after depletion of sub-micron-sized particles in regolith simulant

P96: EPSC2018-105
Intracrystalline geothermometers validated on synthetic clinol and orthopyroxenes and applied to a terrestrial analogue
Murri Mara, Cámara Fernando, Adam John, Domeneghetti Maria Chiara, Alvaro Matteo

END OF POSTER PROGRAMME LFI1
LFI2 The distributed planetary simulation and sample analysis facilities

Convener: Jörn Helbert
Co-conveners: Felipe Gómez; Gareth Davies
Chairperson: Gareth Davies
Attendance time: Thursday, 18:15–20:00

P97: EPSC2018-58
Research using a European Planetary Simulation Facility
Merrison Jonathan, Iversen Jens Jacob, Rasmussen Keld R.

P98: EPSC2018-92
Emissivity and reflectance spectra of sulfide-bearing samples: new constraints for the hermean surface composition.
Serventi Giovanna, Carli Cristian, Maturilli Alessandro, Ferrari Sabrina, Gavelli Maria, Secchiari Arianna, Montanini Alessandra, Helbert Jörn

P99: EPSC2018-288
The Center for Microbial Life Detection
Moissl-Eichinger Christine, Koskinen Kaisa

P100: EPSC2018-712
Spectral characterization of a suite of well-characterized bulk soils from the ultraviolet to the far infrared at the Planetary Emissivity Laboratory, DLR Berlin
Donaldson Hanna Kerri, Bowles Neil, Greenhagen Benjamin, Helbert Joern, Maturilli Alessandro

P101: EPSC2018-714
Experimental and modelled mid-infrared spectra of olivine: simulations of extreme temperature conditions
Stangarone Claudia, Maturilli Alessandro, Helbert Jörn

P102: EPSC2018-765
Evolution of the thermal properties of ocean aqueous solutions from Archean chemical compositions to modern seawaters
Muñoz-Iglesias Victoria, Prieto-Ballesteros Olga

P103: EPSC2018-906
CRPG facilities available through Europlanet 2020 RI
Cloquet Christophe, Caly Albert

P104: EPSC2018-909
Emissivity and reflectance measurement at low and high T of different hydrous salts: a tool to study the surface of the icy planets
Comodi Paola, Fastelli Maximiliano, Zucchini Azzurra, Maturilli Alessandro

P105: EPSC2018-323
The distributed planetary simulation and sample analysis facility
Helbert Jörn, Davies Gareth

P106: EPSC2018-1221
Development of the Experimental Set-up for Lunar Dust Particles Investigation and Instruments calibrations
Lyash Andrew, Kuznetsov Iliia, Zakharov Alexander, Dolnikov Gennady, Shashkova Inna

P107: EPSC2018-676
Tracing metabolic pathways of Archean microbial community’s
Nabhan Sami

END OF POSTER PROGRAMME LFI2

LFI3 Cometary, asteroidal and meteoritic materials in laboratory

Convener: Gabriele Arnold
Co-conveners: Eric Quirico; Simone De Angelis; Marco Ferrari; Rosario Brunetto
Chairperson: Marco Ferrari
Attendance time: Thursday, 18:15–20:00

P108: EPSC2018-152
Occurrence of graphite and sinoite in EL6 chondrite Eagle and Pillistfer
Mészáros Nóri, Skála Roman

P109: EPSC2018-1163
UPLC-MS analysis of organic matter in interstellar/cometary ice analogs
Poinot Pauline, Geoffroy Claude, Danger Grégoire

P110: EPSC2018-418
Petrography and mineral chemistry of the ordinary chondrite NWA 11743: the first meteorite classified in a Greek-based laboratory
Pantazidis Avgoustos, Baziots Ioannis, Ferrière Ludovic

P111: EPSC2018-431
Volatiles in merrillite from martian meteorite Tissint
Baziots Ioannis, Anand Mahesh, Zhao Xuchao, Franchi Ian

P112: EPSC2018-456
VIS-IR spectroscopy of Alais CI chondrite by using the SPEctral IMager (SPIM)
Manzari Paola, De Angelis Simone, De Sanctis Maria Cristina

P113: EPSC2018-883
Raman and XRF analysis of the new NWA 11273 Lunar meteorite
Huidobro Jennifer, Aramendia Julene, Madariaga Juan Manuel

P114: EPSC2018-99
The Stirling Planetary Ices Laboratory within the Stirling Centre for Astromaterials Research
Hagermann Axel, Kaufmann Erika, Attree Nicholas, Schroeder Christian, Tait Alastair

P115: EPSC2018-179
Laboratory developments to support space missions exploring the Solar System
Danger Grégoire, Abou Mrad Ninette, Fresneau Aurelien, Duvernay Fabrice, d’Hendecourt Louis
Outreach, Education and Policy

OEP2 Planetary science as an example of Science communication in society

Convener: Julie Nekola Novakova
Co-conveners: Eleni Chatzichristou; Rosa Doran
Chairperson: Eleni Chatzichristou
Attendance time: Thursday, 18:15–20:00

P119: EPSC2018-89
OpenPlanetary: An Open Science Community and Framework for Planetary Scientists and Developers
Manaud Nicolas, Pio Rossi Angelo, Million Chase

P120: EPSC2018-336
Planetary Science Communication through Public Events
Musiol Stefanie, Balthasar Heike, Rosenberg Heike

P121: EPSC2018-514
Aspects of teaching Visual Basic for Application for students of natural scientific specialties
Petrova Natalia, Sitnikov Sergey

P122: EPSC2018-485
PRIME: a REXUS project to demonstrate a miniature free falling unit for plasma measurement

P123: EPSC2018-503
Outreach activities of UniverSCiel association.
Fayon Lucille, Belgacem Ines

P124: EPSC2018-772
Participation of women scientists in ESA solar system missions: an historical trend
Piccialli Arianna, Rathbun Julie A., Vandaeele Ann Carine, Alteri Francesca, Määtätäinen Anni, Millilo Anna, Rotundi Alessandra, Rengel Miriam, Drossart Pierre

P125: EPSC2018-970
Involving School Students in Exoplanet Research Through the Twinkle Space Mission - ORBYTS

P126: EPSC2018-1140
Developing an Arabic Equivalent of the Planetary Nomenclature: a draft for a standardized system
Ettahri Mohamed amine

P127: EPSC2018-959
Digital museum collection to maintain heritage in planetary research
Kolenkina Maria, Kozlova Natalia, Garov Andrey, Karachevtseva Irina

P128: EPSC2018-675
Stories of Tomorrow: first year of implementation
Tyszka Steph, Doran Rosa, Saraiva José

P129: EPSC2018-403
Europlanet - Impact of outreach activities to date and looking ahead to a sustainable future
Heward Anita, Barrosa Mariana, Giacomini Livia

P130: EPSC2018-784
Europlanet Policy Activities toward FP9
Giacomin Livia, Heward Anita, Mason Nigel

P131: EPSC2018-1272
Europlanet 2020 RI Outreach Innovation and Communication Training Workshops
Chatzichristou Eleni, Daglis Ioannis, Heward Anita, Tautvaisiene Grazina, Russo Pedro, Doran Rosa

P132: EPSC2018-1268
ExoWorlds Spies: a project for public involvement in exoplanet research
Kokori Anastasia, Tsiaaras Angelos

END OF POSTER PROGRAMME OEP2

OEP6 Astrobiology Teaching, Outreach and Dissemination

Convener: Klara Anna Capova
Co-convener: Elias Chatzitheodoridis
Chairperson: Elias Chatzitheodoridis
Attendance time: Thursday, 18:15–20:00

P133: EPSC2018-695
Attitudes towards the scientific search for extra-terrestrial life among Swedish high school and university students
Persson Erik, Capova Klara Anna, Li Yuan

P134: EPSC2018-134
Astrobiology and Society in Europe Today
Capova Klara Anna, Persson Erik, Milligan Tony, Duner David

END OF POSTER PROGRAMME OEP6
OEP7 Policy Towards the International Lunar Decade & Planetary exploration outreach through Arts

Convener: Bernard Foing  
Co-conveners: Vidvuds Beldavs  
Chairperson: Germaine van der Sanden, Bernard Foing  
Attendance time: Thursday, 18:15–20:00

P135: EPSC2018-915  
A possibility to teach planetary and space science by increasing enthusiasm: the school year of 2018-2019 covers as 50 years anniversary of the preparations to lunar landing in 1969 July by NASA

Bérczi Szaniszló, Ságodi Ibolya

P136: EPSC2018-924  
Astrojots: Explaining space and its exploration with cartoons

Jones Geraint

P137: EPSC2018-1227  
Pop Culture and Planetary Studies

James Matthew, Foing Bernard

P138: EPSC2018-1073  
Economic impact of the International Lunar Decade

Beldavs Vidvuds, Sommers Jeffrey

P139: EPSC2018-616  
Lunar electrical power utility: Key to lunar development

Beldavs Vidvuds, Vjetas Janis, Dunlop David, Crisafulli Jim, Foing Bernard

P140: EPSC2018-1038  
Ecosystem design and engineering: Key to permanent return to the Moon

Beldavs Vidvuds, Ubelis Arnold, Foing Bernard

END OF POSTER PROGRAMME OEP7

Terrestrial Planets

TP3/AB5 Mars Express: 15 years of hard work and discoveries (co-organized)

Convener: Dmitrij Titov  
Co-conveners: Olivier Witasse; Francisco González-Galindo; Daniela Tirsch; Anni Määttänen  
Attendance time: Thursday, 18:15–20:00

P141: EPSC2018-123  
Exploring the Atmosphere of Mars with Remote Observations: Activities in Japan for the Belgium-Japan partnership (AMAVERO)

Kasaba Yasumasa, Nakagawa Hiromu, Sagawa Hideo, Kuroda Takeshi, Imamura Takeshi, Kasai Yasuko, Yamazaki Atsushi, Sato Takao, Maezawa Hiroyuki, Taguchi Makoto, Kashimura Hiroki, Murata Isao, Terada Naoki, Sakanoi Takeshi, Vandaele Ann Carine, Aoki Shohei, Robert Severine, Wilquet Valerie, Mahieux Arnaud, Coheur Pierre-François and the AMAVERO team

P142: EPSC2018-124  
Spectral inversion of OMEGA/MEx limb observations considering multiple scattering


P143: EPSC2018-207  
Modification of the retrieval tool JACOSPAR for the Martian limb observations

Toyooka Masashi, Mahieux Arnaud, Aoki Shohei, Iwabuchi Hironobu, Kasaba Yasumasa, Nakagawa Hiromu

P144: EPSC2018-242  
Analysis of spectral orbital and laboratory data to further constrain Martian habitable environments

Alemanno Giulia, Maturilli Alessandro, Helbert Joern, D’Amore Mario, Varatharajan Indhu, Noack Lena

P145: EPSC2018-313  
More and still unexploited atmospheric OMEGA/MEx observations

Gondet Brigitte, Bibring Jean-Pierre

P146: EPSC2018-329  
15 years of fascinating Mars press images and movies from the High Resolution Stereo Camera on Mars Express, prepared at Freie Universität Berlin

Musiol Stefanie, Balthasar Heike, Dumke Alexander, Gross Christoph, Neu Dominik, Schreiner Björn, Jaumann Ralf

P147: EPSC2018-352  
Topographic mapping of the Mars MC quadrangles using HRSC data

Kersten Elke, Gwinner Klaus, Michael Gregory, Bostelmann Jonas, Dumke Alexander, Wählisch Marita, Jaumann Ralf

P148: EPSC2018-552  
High resolution spectra of CO₂ ice based on SPICAM/MEX observations

Lomakin Alexander, Korabeln Oleg, Montmessin Franck, Lacombe Gaetan, Lefèvre Franck

P149: EPSC2018-896  
Release of 12+ years of MEX-MARSIS Subsurface data in the ESA’s Planetary Science Archive

Grotheer Emmanouel, Besse Sebastien, Vallat Claire, Barthelemy Maud, Coia Daniela, Costa Marc, De Marchi Guido, Fraga Diego, Heather Dave, Lim Tanya, Martinez Santa, Bentley Mark, Martin Patrick, Arviset Christophe, Barbarisi Isa, DocasalRuben, MacFarlane Alan, Rios Carlos, Saiz Jaime, Vallejo Fran

P150: EPSC2018-1044  
MARSIS Observations of Phobos: Preliminary Results of the Search for Underground Reflectors

Hegler Sebastian, Plattemeier Dirk, Chicchetti Andrea, Nenna Carlo, Plaut Jeffrey, Noschese Raffaelea, Ivanov Anton, Herique Alain, Orosei Roberto

END OF POSTER PROGRAMME TP3/AB5
TP7/SB20 Impact processes on terrestrial planets and other planetary bodies (co-organized)

Convener: Elena Martellato  
Co-conveners: Natalia Artemieva; Kai Wünnemann  
Chairpersons: E. Martellato, N. Artemieva, K. Wünnemann  
Attendance time: Thursday, 18:15–20:00

P151: EPSC2018-889  
Testing impact numerical model setups for simple craters  
Prieur Nils C., Rolf Tobias, Werner Stephanie

P152: EPSC2018-96  
Experimental Investigation of the Formation of Complex Craters  
Martellato Elena, Wünnemann Kai, Dörfler Matthias, Schuster Bennet, Kenkmann Thomas

P153: EPSC2018-133  
Shock alteration of geological minerals from impact cratering experiments  
Harriss Kathryn, Burchell Mark

P154: EPSC2018-1111  
An integrated CL, SEM, and optical microscopy study of carbonate impact melts in the Ries suevites  
Hamann Christopher, Hecht Lutz, Blåsing Saskia, Siegert Sanni

P155: EPSC2018-957  
Identification of kerogen by SCA device in materials produced by the impact of an extraterrestrial material on Earth  
Gomez-Nubla Leticia, Aramendia Julene, Torre-Fdez Imanol, Ruiz-Galende Patricia, Fdez-Ortiz de Vallejuelo Silvia, Madariaga Juan Manuel

P156: EPSC2018-1248  
Impactor material in new lunar meteorite NWA 10989  
Morland Zoe, Joy Katherine

P157: EPSC2018-261  
$^{14}$C dating of small impact craters on Earth  
Losiak Anna

P158: EPSC2018-1087  
Käräla impact crater - transitional from simple to complex based on reflection seismics  
Jõeleht Argo, Plado Jüri, Sarv Kaidi

P160: EPSC2018-791  
Summanen, the twelfth meteorite impact structure in Finland  
Pesonen Lauri J., Kreitsmann Timmu, Hietala Satu, Lerssi Jouni, Nenonen Jari, Plado Jüri

P161: EPSC2018-1049  
Origin of melt heterogeneities in Ries impact breccia  
Siegert Susann, Hecht Lutz

P162: EPSC2018-833  
Impact melt boulder from northern Sweden from an unknown source  
Kreitsmann Timmu, Hietala Satu, Soukka Tapio, Plado Jüri, Nenonen Jari, Pesonen Lauri J.

P163: EPSC2018-316  
(S)TEM analysis of quartz-coesite relations in impact ejecta from the Australasian tektite strewn field  
Campanale Fabrizio, Mugnaioli Enrico, Gemmi Mauro, Lee Martin R., Glass Billy P., Folco Luigi

P164: EPSC2018-327  
Sulfide globules in Muong Nong-type tektites from Laos  
Křížová Šárka, Skála Roman, Ackerman Lukáš, Žák Karel, Magna Tomáš

P165: EPSC2018-835  
Variability within and between large bodies of Muong Nong-type tektites in Laos  
Skála Roman, Křížová Šárka, Matoušková Šárka, Trnka Milan, Žák Karel

END OF POSTER PROGRAMME TP7/SB20
**Terrestrial Planets**

**TP3/AB5 Mars Express: 15 years of hard work and discoveries (co-organized)**

**Convener:** Dmitri Titov  
**Co-conveners:** Olivier Witasse; Francisco González-Galindo; Daniela Tirsch; Anni Määttänen  
**Lecture Room:** Saturn

**10:45–12:30**

<table>
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<th>Time</th>
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| 10:45–11:00 | **EPSC2018-895**  
Mars Express: 15 years of hard work and discoveries  
**Titov Dimitrij**, Bibring Jean-Pierre, Cardesin Alejandro, Duxbury Thomas, Forget Francois, Giuranna Marco, González-Galindo Francisco, Holmström Mats, Jaumann Ralf, Määttänen Anni, Martin Patrick, Montmessin Franck, Orosei Roberto, Pätzold Martin, Plaut Jeffrey, Team Mex Sgs |
| 11:00–11:30 | **EPSC2018-1096**  
HRSC at Mars: 15 years of research (and counting)  
**Hauber Ernst**, Jaumann Ralf and the HRSC Team |
| 11:30–11:45 | **EPSC2018-912**  
The Roles that HRSC Digital Terrain Models Have in Supporting Martian Polar Science  
**Putri Alfiah Risky Diana**, Muller Jan-Peter, Sidiropoulos Panagiotis, Walter Sebastian H. G., Michael Greg G. |
| 11:45–12:15 | **EPSC2018-362**  
Changing the paradigm of Mars history and evolution  
**Bibring Jean-Pierre** |
| 12:15–12:30 | **EPSC2018-49**  
A New View of Mars Aqueous Alteration: First Results from The Mars Orbital Catalogue of Chemical Alteration Signatures (MOCAS)  
**Carter John** |
| 12:30 | **Lunch break** |
| 14:00–14:15 | **EPSC2018-561**  
Global distribution of mafic minerals abundances and associated chemical composition at Mars: a legacy of OMEGA  
**Riu Lucie**, Poulet François, Gondet Brigitte, Langevin Yves, Carter John, Bibring Jean-Pierre |
| 14:15–14:45 | **EPSC2018-474**  
Couplings between the lower and upper atmosphere of Mars (solicited talk)  
**Montmessin Franck**, Korabliev Oleg, Lefèvre Franck, Fedorova Anna, Trokhimovskiy Alexander, Berthaux Jean-Loup, Chaufray Jean-Yves, Chaffin Michael, Schneider Nicholas |
| 14:45–15:00 | **EPSC2018-337**  
Clouds in the night side of Mars: an analysis using Mars Express VMC  
**Hernandez Bernal Jorge**, Sánchez Lavega Agustín, del Río Gaztelurrutia Teresa, Hueso Ricardo, Cardesin Moinelo Alejandro, de Burgos Sierra Abel, Titov Dmitri, Wood Simon, Dias Almeida Miguel |
| 15:00–15:15 | **EPSC2018-960**  
Construction and use of a 4D cloud database derived from MEx/OMEGA data - Cloud life cycle over polar regions  
**Szantai Andre**, Wolff Michael, Audouard Joachim, Forget Francois, Madeleine Jean-Baptiste, Pottier Alizée, Millour Ehouarn, Gondet Brigitte, Langevin Yves, Bibring Jean-Pierre |
| 15:15–15:30 | **EPSC2018-941**  
Inversion of vertical profiles of CO₂ in the Mars daylight thermosphere from its non-thermal emission at 4.3 μm  
**Jiménez-Monferrer Sergi**, López-Valverde Miguel Ángel, Funke Bernd, López-Puertas Manuel, González-Galindo Francisco, García-Comas Maya |
| 15:30 | **Coffee break** |
| 16:15–18:15 | **EPSC2018-506**  
Mars Express characterization of the Martian ionosphere (solicited talk)  
**González-Galindo Francisco**, Kopf Andrew, Pätzold Martin, Gurnett Donald, Morgan Dave, Némec František, Peter Kerstin, Sánchez-Cano Beatriz, Tellman Silvia, Witasse Olivier |
| 16:15–17:15 | **EPSC2018-512**  
15 years in the induced magnetosphere of Mars: ion escape and all around (solicited talk)  
**Barbash Stas**, Holmström Mats |
| 17:15–17:30 | **EPSC2018-383**  
Ions accelerated by sounder-plasma interaction as observed by Mars Express  
**Voshchepynets Andrii**, Barbash Stas, Holmstrom Mats, Ramstad Robin, Stenberg Wieser Gabriella, Frahm Rudy, Kopf Andrew, Gurnett Donald |
| 17:30–17:45 | **EPSC2018-966**  
Mars Express Science Ground segment evolution along 15 years of mission, new challenges and future perspectives  
**Marín-Yaseli de la Parra Julia**, Cardesin Alejandro, Merritt Donald, Castillo Manuel, Breitfellner Michel, Costa i Sitjà Marc, Grotheer Emmanuel, Martin Patrick, Titov Dimitri |
| 17:45–18:00 | **EPSC2018-1048**  
Mars Express going Gyroless - Impact on science operations systems  
**Muñiz Carlos**, Cardesin Alejandro, Marín-Yaseli de la Parra Julia, Costa i Sitjà Marc, Merritt Donald, Castillo Manuel, Breitfellner Michel, Grotheer Emmanuel, Martin Patrick, Nespoli Federico, Kueppers Michael, Buenadicha Guillermo, Geiger Berhnard, Titov Dimitri |
TP7/SB20 Impact processes on terrestrial planets and other planetary bodies (co-organized)

Convener: Elena Martellato
Co-conveners: Natalia Artemieva; Kai Wünnemann
Lecture Room: Venus

08:30–10:15
Chairpersons: Kai Wünnemann, Natasha Artemieva

Large basins: formation and environmental effects

08:30–08:45: EPSC2018-871
Impact-Induced Melting by Giant Collision Events
Manske Lukas, Wünnemann Kai, Nakajima Miki, Burger Christoph, Plesa Ana-Catalina

08:45–09:00: EPSC2018-776
Numerical modelling of giant collisions - The Moon-forming impact event
Güldemeister Nicole, Manske Lukas, Wünnemann Kai

09:00–09:15: EPSC2018-755
The South-Pole Aitken basin formation and its effects on the melting activity in the lunar mantle
Padovan Sebastiano, Breuer Doris, Manske Lukas, Martellato Elena, Plesa Ana-Catalina, Ruedas Thomas, Schwinger Sabrina, Tosi Nicola

09:15–09:30: EPSC2018-224
Formation of impact basins on the moon - insights from numerical modeling, gravity and remote sensing data
Lompa Tomke, Wünnemann Kai, Zhu Meng-Hua

09:30–09:45: EPSC2018-1175
Post Impact Hydrothermal Activity. Thermodynamic Simulations on the Chicxulub Crater and Habitability Assessment.
Christou Evangelos, Bach Wolfgang

09:45–10:00: EPSC2018-8
Regolith mixing by impacts: Lateral diffusion of basin melt
Liu Tiantian, Michael Greg, Engelmann Juliane, Wünnemann Kai, Oberst Jürgen

10:00–10:15: Discussion

10:15 Coffee break

10:45–12:30
Chairpersons: Luigi Folco, Nicole Güldemeister

Impacts: shock features in nature and experiments

10:45–11:00: EPSC2018-213
Direct quartz-coesite transformation in shocked sandstones from Kamil Crater (Egypt)
Folco Luigi

11:00–11:15: EPSC2018-265
Constraining shock wave propagation direction from planar microstructures in quartz and feldspar
Pittarello Lidia, Ferrière Ludovic, Osinski Gordon R.

11:15–11:30: EPSC2018-709
Spherical shock experiments with Chelyabinsk meteorite: The experiment and textural gradient
Petrova Evgeniya, Grokhovsky Victor, Kohout Tomas, Mutvakhetdinova Razilia, Yakovlev Grigoriy

11:30–11:45: EPSC2018-827
Spherical shock experiments with Chelyabinsk meteorite: reflectance spectra changes with increasing shock
Kohout Tomas, Petrova Evgeniya, Yakovlev Grigoriy, Grokhovsky Victor, Penttilä Antti, Maturilli Alessandro

11:45–12:00: EPSC2018-212
Shock-darkening in a shock-recovered ordinary chondrite? Numerical model of the experiment
Moreau Juilia-Gabrielle, Kohout Tomas, Wünnemann Kai

12:00–12:15: EPSC2018-986
Impact vaporization and condensation of planetary materials in laser irradiation experiments
Hamann Christopher, Hecht Lutz, Schäffer Sebastian, Heunoske Dominic, Salge Tobias, Greshake Ansgar, Garbout Amin, Osterholz Jens

12:15–12:30: Discussion

12:30 Lunch break

14:00–15:30
Chairpersons: Elena Martellato, Lidia Pittarello

Impacts: from the projectile to the final crater morphology

14:00–14:15: EPSC2018-299
Impact flashes on the Moon.
Avdellidou Chrysa

14:15–14:30: EPSC2018-102
Misleading projectile determination by Cr/Ni and Ni/Co ratios of Australasian microtektites and impact melt rocks
Schmidt Gerhard

14:30–14:45: EPSC2018-955
Crater depth statistics: constraining obliteration rates from secondary clusters of Mojave crater
Breton Sylvain, Quantin-Nataf Cathy, Pan Lu, Bodin Thomas, Bras Erwan
14:45–15:00: EPSC2018-139
Influence of Target Properties on Ejecta Scaling Relationships
Luther Robert, Wünnewann Kai

15:00–15:15: EPSC2018-292
Combined remote sensing analyses and landscape evolution modeling of the terrestrial Bosumtwi crater
Wulf Gerwin, Heragten Stefan, Konkman Johann Thomas

15:15–15:30: EPSC2018-1040
Formation of nanoscopic Lingunit and alternating augite-plagioclase wedges at Lockne impact crater, Sweden
Agarwal Amar, Reznik Boris, Kontky Agnes

14:00–15:15: EPSC2018-155
Telecontrol of ExoGeoLab Lander
Dubois Louis

14:15–14:30: EPSC2018-258
Four Centuries of European Planetary Mapping: Towards Mapping for New Human Surface Operations
Hargitai Henrik, Pitura Mateusz

14:30–14:45: EPSC2018-592
Dealing with a physically disabled crew member: Lessons learned by the crew of the ICares-1 mission
Heinicke Christiane, Kazmarzyk Marcin, Perycz Małgorzata, Wasniowski Aleksander

14:45–15:00: EPSC2018-639
EuroMoonMars 2018 Workshop: Hands-on demonstration gand practice before analogue simulations.
Dubois Louis, Clavé Élise, Sanden Germaine, Foing Bernard

15:00–15:15: EPSC2018-819
Mission to the Moon and the return to Apollo 17
Krienning Torsten

15:15–15:30: EPSC2018-1197
On the need to consider the dynamics of future governmental and cooperate space travel and their effects on the non-biological environment in the planetary system
Fritz Jörg

END OF ORAL PROGRAMME LSE6/MTI10

**Exoplanets and Origins**

EXO1 Observations and modelling of exoplanet atmospheres, interiors and orbits

Convener: Giovanna Tinetti
Co-conveners: Olivia Venot; Ravit Helled
Lecture Room: Neptune

08:30–10:00

08:30–08:40: EPSC2018-803
Effect of geologically-constrained environmental parameters on the atmosphere and biosphere of early exo-Earths
Gebauer Stefanie, Grenfell John Lee, Lehmann Ralph, Rauer Heike

08:40–08:50: EPSC2018-705
Stellar and Exoplanetary Atmospheres Bayesian Analysis Simultaneous Spectroscopy
Morello Giuseppe, Tsiaras Angelos, Howarth Ian, Lagage Pierre-Olivier

08:50–09:00: EPSC2018-862
Correcting HIRES radial-velocities for systematic errors
Tal-Or Lev, Trifonov Trifon, Zucker Shay, Mazeh Tsevi, Zechmeister Mathias

09:00–09:10: EPSC2018-980
Mapping exoplanet clouds with high-dispersion spectro-polarimetry
Garcia Muñoz Antonio

09:10–09:20: EPSC2018-987
Water detection in the near infrared in HD 189733 b with CARMENES
Sánchez López Alejandro, Alonso Floriano Francisco, Javier, Snellen Ignas, López Puertas Manuel, Nagel Evangelos, Hoeijmakers Jens, Bauer Florian, Amado Pedro, Caballero Jose Antonio, Quirrenbach Andreas, Ribas Ignasi, Reiners Ansgar

09:20–09:30: EPSC2018-818
Coupling the internal and orbital evolution of close-in terrestrial exoplanets
Walterova Michaela, Behounkova Marie

09:30–09:40: EPSC2018-1008
The legacy of HST/WFC3: a prototype for future population studies of exoplanets
Tsiaras Angelos
09:40–09:50: EPSC2018-1026
Global Chemistry and Thermal Structure Models for the Hot Jupiter WASP-43b and Predictions for JWST
Venot Olivier, Crouzet Nicolas, Carone Ludmila, Tremblin Pascal, Parmentier Vivien, Moses Julianne, Cubillos Patricio, Bleic Jasmina, Molliere Paul, Kreidberg Laura, Stevenson Kevin B.

09:50–10:00: EPSC2018-1083
Atmospheric characterisation of exoplanets via broadband color filters on the PLATO 2.0 mission
Grenfell John Lee, Godolt Mareike, Cabrera Juan, Carone Ludmila, Garcia Munoz Antonio, Kitzmann Daniel, Rauer Heike

10:00 Coffee break

10:45–11:45

On the exospheres of the rocky planets HD219134b and c
Lichtenegger Herbert, Vidotto Aline, Fossati Luca

10:55–11:05: EPSC2018-1115
Ultra-short Period Rocky Super-Earths
Malavolta Luca and the HARPS-N GTO Science Team and Collaborators

11:05–11:15: EPSC2018-1191
Transits in the Solar System and the Composition of the Exoplanet Atmospheres
Laine Pauli

11:15–11:25: EPSC2018-1199
Exogenic Volatiles in the Extended Exospheres of Extrasolar Giant Planets
Oza Apurva V., Johnson Robert E., Arras Phil, Thomas Nicolas, Schmidt Carl, Demory Brice-Olivier, Mordasini Christoph, Wytenbach Aurelien, Schneider Nick, Bourrier Vincent, Allart Romain, Ehrenreich David, Dubois David, Saxena Prabal

11:25–11:35: EPSC2018-1204
The ExoMol Atlas of Molecular Opacities
Yurchenko Sergey, Tennyson Jonathan, Chubb Katy, Mant Barry, Coles Phillip, Owens Alec, Jagoda Pawel, Polyanysky Oleg

11:35–11:45: EPSC2018-1217
A GIANO@TNG view of the atmosphere of transiting hot jupiters
Giacobbe Paolo, Bonomo Aldo, Sozzetti Alessandro, Guilluy Gloria

END OF ORAL PROGRAMME EXO1

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**Astrobiology**

**AB1 Astrobiology**

Convener: John Robert Brucato
Co-convener: Felipe Gómez
Lecture Room: Uranus

14:00–15:45

14:00–14:15: EPSC2018-278
A hydrothermal-sedimentary origin of life scenario
Westall Frances

14:15–14:30: EPSC2018-63
Astrobiological interest of deep subsurface geomicrobiology
Escudero Cristina, Oggerin Monike, Rodriguez Nuria, Amils Ricardo

14:30–14:40: EPSC2018-248
Microbial growth in simulated martian environments

14:40–14:50: EPSC2018-356
The Role of Atmospheric Nitrogen as a Geo-Biosignature
Spross Laurenz, Lammer Helmut, Grenfell John Lee, Scherf Manuel, Fossati Luca, Lendl Monika, Cubillos Patricio E.

14:50–15:00: EPSC2018-228
M Dwarfs, Super Earths and photosynthetic bacteria: a mix for laboratory studies
Claudi Riccardo, La Rocca Nicoletta, Poletto Luca, Alei Eleonora, Battistuzzi Mariano, Cocola Lorenzo, Pace Emanuele

15:00–15:10: EPSC2018-814
Towards new potential strategies for biosignatures detection: correlating the physico-chemistry and complexity of amino acids from deep space
Da Pieve Fabiana, Botek Edith, Vandaene Ann Carine

15:10–15:20: EPSC2018-1133
Zag-Monahans relation to Comets and Biotic Chemicals
Williams Max, Wickramasinghe Chandra, Al-Multi Shirwan

15:20–15:30: EPSC2018-1262
Klener Fabian, Postberg Frank, Stolz Ferdinand, Khawaja Nozair, Reviol René

15:30–15:45: EPSC2018-1284
The European Astrobiology Institute
Geppert Wolf D., Brucato John R., Cabezas Patricia, Falanga Maurizio, Gargaud Muriel, Henning Thomas, Hrušák Jan, Kirsimäe Kalle, Martínez-Frias Jesús, Mason Nigel, Mazevet Stephane, Messina Piero, Spho̅n̄ Tilman, Taubner Ruth-Sophie, VisoMichel, Walter Nicolas, Westall Frances

END OF ORAL PROGRAMME AB1
Small Bodies (comets, KBOs, rings, asteroids, meteorites, dust)

SB4 Asteroids and parent bodies of meteorites: Observations, experiments, models

Convener: Wladimir Neumann
Co-conveners: Marco Ferrari; Sabrina Schwinger; Eleonora Ammannito; Ottaviano Ruesch
Lecture Room: Neptune

14:00–15:45 Chairpersons: Wladimir Neumann, Sabrina Schwinger, Marco Ferrari

14:00–15:45 EPSC2018-498 µ-IR + SEM/EDS combined technique for Carbonaceous Chondrite meteorites characterization as possible analogues of Hayabusa2 and Osiris-REx asteroid targets
Dirri Fabrizio, Ferrari Marco, Palomba Ernesto, Stefani Stefania, Longobardo Andrea, Rotundi Alessandra

14:15–14:30: EPSC2018-627 Early Aqueous alteration of Mukundpura (CM2) chondrite-a recent fall in India
Panda Dipak K., Ray Dwijesh, Shukla Anil D.

14:30–15:00: EPSC2018-662 The interior of Enceladus one year after Cassini (solicited talk)
Choblet Gael, Tobie Gabriel, Cadek Ondrej, Sotin Christophe, Bouffard Mathieu, Postberg Frank, Kervazo Mathilde, Behoukova Marie, Soucek Ondrej

14:50–15:05: EPSC2018-131 Evaluating the extent of aqueous alteration among the fine-grained micrometeorite flux
Suttle Martin D, Folco Luigi, Genge Matt, Russell Sara

15:05–15:20: EPSC2018-1012 Fifteen years of Antarctic micrometeorite research by the Italian Programma Nazionale delle Ricerche in Antartide
Folco Luigi

Michel Patrick, Küppers Michael, Biele Jens, Campo Bagatin Adriano, Carry Benoit, Charnoz Sebastien, Fitzsimmons Alan, Green Simon, Hérice Alain, Jutzi Martin, Karatekin Ozgur, de Leon Julia, Murdoch Naomi, Pravec Petr, Sierks Holger, Tortora Paolo, Tsiganis Kleomenis, Vincent Jean-Baptiste, Wünnewmann Kai, Carnelli Ian

15:35–15:45: EPSC2018-930 The meteorite flux of the last 2 Myr recorded in Atacama
Drouard Alexis, Gattacceca Jérôme, Hutzler Aurore, Rochette Pierre, Brauchert Régis, Bourlès Didier, Team Aster, Gounelle Matthieu, Morbidelli Alessandro, Debaillie Vinciane, Valenzuela Millarca

END OF ORAL PROGRAMME SB4

SB8/AB4 Comets after Rosetta - what do we know and what are the new questions (co-organized)

Convener: Matthew Taylor
Co-conveners: Maria Teresa Capria; Bonnie Buratti; Mathieu Choukroun
Lecture Room: Jupiter

08:30–10:15

08:30–08:45: EPSC2018-823 On understanding multi-instrument Rosetta data of the innermost dust and gas coma of comet 67P/Churyumov-Gerasimenko - results, strengths, and limitations of models

08:45–09:00: EPSC2018-704 Seasonal evolution of comet 67P’s near-nucleus coma: a model interpretation of Rosetta/OSIRIS observations
Shi Xian, Rose Martin and the OSIRIS-Team

09:00–09:15: EPSC2018-21 Exploring the compositional heterogeneity of dust particles of 67P/Churyumov-Gerasimenko
Exploring the Compositional Heterogeneity of Dust Particles of 67P/Churyumov-Gerasimenko
Hilchenbach Martin and the COSIMA Team

09:15–09:30: EPSC2018-920 Alkali metals and other light elements in the dust of comet 67P/Churyumov-Gerasimenko
Stenzel Oliver, Hilchenbach Martin, Paquette John, Ryno Jouni

09:30–09:45: EPSC2018-285 The global composition of comet 67P’s dust as measured in situ by the COSIMA mass spectrometer
Baklouti Donia, Bardyn Anais and the COSIMA team

09:45–10:00: EPSC2018-698 Nano-to-micro dust environment monitored by GIADA during the entire ROSETTA scientific phase
Della Corte Vincenzo, Rotundi Alessandra, Fullo Marco, Ivanovski Stavro, Longobardo Andrea, Rinaldi Giovanna, Zakharov Vladimir

10:00–10:15: EPSC2018-865 Organic features in the spectrum of 67P/Churyumov-Gerasimenko from the improved calibration of VIRTIS-M-IR
Raponi Andrea, Ciarnelio Mauro, Filacchione Gianrico, Capaccioni Fabrizio, De Sanctis Maria Cristina, Moroz Ljuba V., Vinogradoff Vassilissa, Tosi Federico, Arnold Gabriele, Quirico Eric, Menella Vito, Beck Pierre, Pilorget Cedric, Pommerol Antoine, Schroder Stefan, Kappel David, Istiqomah Istiqomah, Rousseau Batiste, Poch Olivier

10:15 Coffee break
10:45–12:30

10:45–11:00: EPSC2018-479
Cometary dust, present understanding and open questions after the Rosetta mission

Levasseur-Regourd A.Chantal, Agarwal Jessica, Cottin Herve, Engrand Cecile, Flynn George, Fulle Marco, Gombosi Tamás, Langenin Yves, Lasue Jeremie, Mannel Thiur, Merouane Shiane, Thomas Nick, Poch Olivier, Westphal Andrew

11:00–11:15: EPSC2018-640
Dielectric properties of comet 67P/CG and implications for the 2021 radar observations of its next closest approach

Heggy Essam, Palmer Elizabeth, Héritique Alain, Kolman Włodek

11:15–11:30: EPSC2018-538
Sublimation of cometary ice and mobilization of the dust mantle.

Kossacki Konrad, Misiura Katarzyna

11:30–11:45: EPSC2018-593
A Comet Active Beyond the Crystallization Zone

Jewitt David, Hui Man-To, Mutchler Max, Weaver Harold, Li Jing, Agarwal Jessica

11:45–12:00: EPSC2018-366
Experiments on cometary activity: ejection of dust aggregates from an evaporating water-ice surface

Bischoff Dorothea, Gundlach Bastian, Neuhaus Martin, Blum Jürgen

12:00–12:15: EPSC2018-162
Agglomeration of 67P/Churyumov-Gerasimenko from clathrates and crystalline ices

Mousis Olivier, Ronnet Thomas, Lunine Jonathan, Wurz Peter, Mandt Kathleen, Vernazza Pierre, Luspay-Kuti Adrienn, Pauzat Françoise, Ellinger Yves, Danger Grégoire, d’Hendecourt Louis

12:15–12:30: EPSC2018-289
Constraining activity models of comet 67P/Churyumov-Gerasimenko with Rosetta data

Attree Nicholas, Jorda Laurent, Groussin Olivier, Mottola Stefano, Thomas Nick, Brouet Yann, Poch Olivier, Kuehrt Ekhard, Preusker Frank, Scholten Frank, Knollenburg Jorg, Hvid Stubbe, Hartogh Paul

12:30 Lunch break

14:00–15:45

14:00–14:15: EPSC2018-724
Inbound to perihelion dust activity of 67P/Churyumov-Gerasimenko’s Northern hemisphere

Longobardo Andrea, Della Corte Vincenzo, Ivanovski Stavro, Rinaldi Giovanna, Rotundi Alessandra, Fulle Marco, Capaccioni Fabrizio, Palomba Ernesto, Palumbo Pasquale, Tosi Federico, Capria Maria Teresa, Filacchione Gianrico, Raponi Andrea, Ciarniello Mauro, Bockelee-Morvan Dominique, Erard Stephane, Leyrat Cedric

14:15–14:30: EPSC2018-910
VIRTIS and GIADA observations of summer outbursts on 67P/CG

Rinaldi Giovanna, Della Corte Vincenzo, Longobardo Andrea, Rotundi Alessandra, Fulle Marco, Bockelee-Morvan Dominique, Capaccioni Fabrizio, Ivanovski Stavro, Filacchione Gianrico, Raponi Andrea, Ciarniello Mauro, Erard Stephane, Leyrat Cedric, Formisano Michelangelo

14:30–14:45: EPSC2018-701
Mass loss during outbursts on comet 67P

Agarwal Jessica, Della Corte Vincenzo, Geiger Bernhard, Gruen Eberhard, Markkanen Johannes, Marschall Raphael, Rotundi Alessandra, Rubin Martin and the the Teams of GIADA, OSIRIS, and ROSINA

14:45–15:00: EPSC2018-693
Evidence for a Surface Evolution Trend in Jupiter-Family Comets

Kokotanekova Rosita, Snodgrass Colin, Lacerda Pedro, Green Simon F.

15:00–15:15: EPSC2018-580
Bowl shaped features on comet 67P/Churyumov-Gerasimenko as a test of cometary material properties

Deller Jakob, Güttler Carsten, Tubiana Cecilia, Sierks Holger and the OSIRIS Team

15:15–15:30: EPSC2018-933
Spectrophotometric investigation of the layered structure of comet 67P/Churyumov-Gerasimenko

Tognon Gloria, Deller Jakob, Sierks Holger, Ferrari Sabrina, Penasa Luca, La Forgia Fionangela, Massironi Matteo, Naletto Giampiero, Lazzarin Monica

15:30–15:45: EPSC2018-664
Layering-Related Linear Features on Comet 67P

Ruzicka Birko-Katarina, Boehnhardt Hermann, Penasa Luca, Pack Andreas

15:45 Coffee break

16:15–18:00

16:15–16:30: EPSC2018-927
Geomorphological units of Khepry and Imhotep regions of comet 67P/Churyumov-Gerasimenko

Ferrari Sabrina, Feller Clement, Massironi Matteo, Penasa Luca, Cambianica Pamela, Naletto Giampiero, Fornasier Sonia

16:30–16:45: EPSC2018-687
Seasonal colors cycling on 67P/CG nucleus and coma

Filacchione Gianrico, Ciarniello Mauro, Raponi Andrea, Capaccioni Fabrizio, De Sanctis Maria Cristina, Capria Maria Teresa, Tosi Federico, Rinaldi Giovanna, Longobardo Andrea, Erard Stephane, Bockelee-Morvan Dominique, Leyrat Cedric, Arnold Gabrielle

16:45–17:00: EPSC2018-249
Colours, albedos and spectral properties of the Khepy-Imhotep region of comet 67P as observed by Rosetta/OSIRIS during the April 2016 flyby

Feller Clement, Fornasier Sonia, Hasselmann Pedro, Barbucci Maria Antonella, Ferrari Sabrina, Massironi Matteo, Deshapriya Jasinghede D. Prasanna
17:00–17:15: EPSC2018-618
Analysis of phase curve of 67P/Churyumov-Gerasimenko at small phase angles using Rosetta-OSIRIS images
Masoumzadeh Nafiseh, Tubiana Cecilia, Guettler Carsten, Sierks Holger and the OSIRIS team

17:15–17:30: EPSC2018-808
Colors and morphology of sources of activity on 67P/Churyumov-Gerasimenko nucleus from OSIRIS/ROSETTA
Fornasier Sonia, Hoang Van H., Hasselmann Pedro H., Feller Clement, Barucci Maria A., Deshapriya Prasanna J.D

17:30–17:45: EPSC2018-1166
Mapping and changes of exposed bright features on the comet 67P/Churyumov-Gerasimenko
Deshapriya J. D. Prasanna, Barucci Antonella, Fornasier Sonia, Hasselmann Pedro, Feller Clement, Sierks Holger

17:45–18:00: EPSC2018-542
Meter scale changes on 67P/Vesta
Vincent Jean-Baptiste, Kuehrt Ekkehard and the OSIRIS team

END OF ORAL PROGRAMME SB8/AB4

SB9 Ceres and Vesta

Convener: Francesca Zambon
Co-conveners: Wladimir Neumann; Eleonora Ammannito; Simone Ieva; Alessandra Migliorini; Daniele Fulvio
Lecture Room: Mars

08:30–10:10
Chairpersons: F. Zambon, W. Neumann

08:30–08:50: EPSC2018-612
Dawn’s Second Extended Mission at Ceres: A New Perspective (solicited talk)
Castillo Julie, Raymond Carol, Russell Christopher, Prettyman Thomas, De Sanctis Maria Cristina, Nathues Andreas, Park Ryan, Polanskey Carol, Joy Steve, Rayman Marc

08:50–09:10: EPSC2018-965
Exploring Ceres geology using Dawn Framing Camera (solicited talk)
Thangjam Guneshwar, Nathues Andreas, Hoffmann Martin, Schmedemann Nico, Mengel Kurt

09:10–09:25: EPSC2018-645
Dawn Data Reveal Ceres’ Complex Crustal Evolution
Raymond Carol A., Castillo-Rozej Julie C., Park Ryan S., Ermakov Anton, Bland Michael T., Marchi Simone, Prettyman Thomas, Ammannito Eleonora, De Sanctis M. Cristina, Russell Christopher T.

09:25–09:40: EPSC2018-606
Laccolithic “Pingo” & Hydrothermal Origins for the Central Features of Occator Crater, Ceres
Schenk Paul, Sizemore Hanna, Schmidt Britney, Bowling Timothy, Castillo-Rozej Julie, Raymond Carol

09:40–09:55: EPSC2018-1254
Revisiting the Cerealia and Vinalia Faculae on Ceres
Neesemann Adrian, van Gaskell Stephan, Marchi Simone, Michael Gregory, Schmedemann Nico, Hiesinger Harald, Jaumann Ralf, Raymond Carol, Russell Christopher

09:55–10:10: EPSC2018-998
The issue of secondary craters on Ceres for the example of the Ahuna Mons region
Schmedemann Nico, Neesemann Adrian, Schulzeck Franziska, Krohn Katrin, von der Gathen Isabel, Otto Katarina A., Jaumann Ralf, Michael Gregory G., Thangjam Guneshwar, Nathues Andreas, Raymond Carol A., Russell Christopher T.

10:10 Coffee break

10:45–12:25
Chairpersons: C. Raymond, N. Schmedemann

10:45–11:05: EPSC2018-449
The Geology of Ceres and Vesta (solicited talk)

11:05–11:25: EPSC2018-751
Disk-resolved photometry of Vesta and Ceres (solicited talk)
Longobardo Andrea, Palomba Ernesto, De Sanctis Maria Cristina, Ciarniello Mauro, Galioni Anna, Schroeder Stefan, Ammannito Eleonora, Tosi Federico, Capaccioni Fabrizio, Zambon Francesca, Carrozzo Filippo Giacomo, Raponi Andrea, Capria Maria Teresa, Stephan Katrin, Rognini Edoardo, Raymond Carol, Russell Christopher

11:25–11:40: EPSC2018-841
Ceres’ surface observed at low phase angles by VIR-Dawn
Ciarniello Mauro, De Sanctis Maria Cristina, Ammannito Eleonora, Raponi Andrea, Carrozzo Filippo Giacomo, Longobardo Andrea, Tosi Federico, Rognini Edoardo, Zambon Francesca, Schroeder Stefan, Raymond Carol A., Russell Christopher T.

Temperature and emissivity of specific regions of interest on Ceres
Tosi Federico, Capria Maria Teresa, Rognini Edoardo, De Sanctis Maria Cristina, Formisano Michelangelo, Thangjam Guneshwar, Zambon Francesca, Ammannito Eleonora, Carrozzo Filippo Giacomo, Ciarniello Mauro, Combe Jean-Philippe, Krohn Katrin, Longobardo Andrea, Nathues Andreas, Palomba Ernesto, Raponi Andrea, Stephan Katrin, Raymond Carol A., Russell Christopher T.

11:55–12:10: EPSC2018-888
High thermal inertia areas on Ceres
Rognini Edoardo, Capria Maria Teresa, Tosi Federico, De Sanctis Maria Cristina, Frigeri Alessandro, Palomba Ernesto, Longobardo Andrea, Fonte Sergio, Giardino Marco, Carrozzo Filippo Giacomo, Raponi Andrea, Ciarniello Mauro, Ammannito Eleonora, Raymond Carol, Russell Christopher
12:10–12:25: EPSC2018-1265
Classification of Dawn/VIR data reveals Homogeneous Units on Ceres surface
Zambon Francesca, De Sanctis M. Cristina, Carrozzo Giacomo, Tosi Federico, Stephan Katrin, Combe Jean-Philippe, Krohn Katrin, Ciarniello Mauro, Longobardo Andrea, Palomba Ernesto, Raponi Andrea, Thangjam Guneshwar, Russell Christopher T., Raymond Carol A.

12:25 Lunch break

14:00–15:45: EPSC2018-1201

Chairpersons: K. Krohn, M. Ciarniello

14:00–14:15: EPSC2018-623

Circumferential Fractures around Craters on Ceres and their Implications for the Properties of the Subsurface
Otto Katharina, Marchi Simone, Trowbridge Alexander, Melosh Jay, Szemere Hanna

14:15–14:30: EPSC2018-1200

Floor-fractured Craters on Ceres
Buczkowski Debra, Szemere Hanna, Bland Michael, Scully Jennifer, Quick Lynnne, Hughson Kynan, Schenk Paul, Castillo-Roquez Julie, Raymond Carol, Russell Chris

14:30–14:45: EPSC2018-685

IR spectroscopy of ammoniated phyllosilicates at low pressure/high temperature conditions
De Angelis Simone, Ferrari Marco, De Sanctis Maria Cristina, Ammannito Eleonora

14:45–15:00: EPSC2018-1243

The intriguing Tina asteroid family: a compositional investigation
Perna Davide, Fanasca Cristina, Ieva Simone, Carruba Valerio, Dotto Elisabetta, Mazzotta Epifani Elena, Fornasier Sonia, Dall’Ora Massimo, Hasselmann Pedro, Alvarez-Candal Alvaro

15:00–15:15: EPSC2018-757

Basaltic material in the main belt: a tale of two parent bodies?
Ieva Simone, Dotto Elisabetta, Lazzaro Daniela, Fulvio Daniele, Perna Davide, Mazzotta Epifani Elena, Medeiros Hissa, Fulchignoni Marcellino

15:15–15:30: EPSC2018-1024

Fine-grained Antarctic micrometeorites and weathered carbonaceous chondrites as possible analogues of Ceres surface: implications on its evolution.
Nava Jacopo, Carli Cristian, Palomba Ernesto, Maturilli Alessandro, Massironi Matteo

15:30–15:45: EPSC2018-1264

Mineralogical and photometric analysis of V-type asteroids
Medeiros Hissa, de Leon Julia, Lazzaro Daniela, Rondon Eduardo, Monteiro Filipe, Popsescu Marcel, Pinilla-Alonso Noemi, Arcoverde Plicida, Morale David, Rodrigues Teresinha, Lorenzi Vania, Landsman Zoe

END OF ORAL PROGRAMME SB9

SB10 Interplanetary and Interstellar Dust

Convener: Ralf Srama
Co-conveners: Harald Krüger
Lecture Room: Uranus
08:30–10:00

08:30–08:45: EPSC2018-181

GRAAL project: in situ optical detection of dust concentration from the Earth’s orbit
Renard Jean-Baptiste, Mousis Olivier, Colas François, Levasseur-Regourd Anny-Chantal

08:45–09:00: EPSC2018-199

Characterisation of the Outer Solar System dust by Cassini-CDA
Altobelli Nicolas, Kempf Sascha, Postberg Frank, Fischer Christian, Albin Thomas, Srama Ralf

08:50–09:15: EPSC2018-719

The Large Interstellar Polarisation Survey
Cox Nick, Bagnulo Stefano, Siebenmorgen Ralf

09:02–09:30: EPSC2018-1187

The measurement of micron sized impact fragment using delay line detector
Li Yanwei, Mocke Anna, Srama Ralf

09:30–09:45: EPSC2018-1223

Dust Astronomy with the DESTINY+ Dust Analyser
Srama Ralf, Kobayashi Masanori, Krüger Harald and the DESTINY+ Team

09:45–10:00: EPSC2018-217

Dust simulations for the Destiny+ mission to (3200) Phaethon

END OF ORAL PROGRAMME SB10

SB11/MD7 Models of atmospheres and exospheres, surfaces, and interiors of small bodies (co-organized)

Convener: Michelangelo Formisano
Co-conveners: Andrea Raponi; Audrey Vorburger
Lecture Room: Uranus
10:45–12:30

10:45–11:00: EPSC2018-369

Outgassing of H2O/CO2 mixtures
Neuhaus Martin, Gundlach Bastian, Blum Jürgen

11:00–11:15: EPSC2018-1218

Numerical SPIS-Dust Modelling of Plasma - Lunar Lander Interactions
Kuznetsov Ilia, Zakharov Alexander, Seran Elena, Hess Sebastian, Cipriani Fabrice, Dolnikov Gennady, Lyash Andrey, Shashkova Inna
11:15–11:30: EPSC2018-497
Europa's Ice-Related Atmosphere: The Sputter Contribution
Vorburger Audrey, Wurz Peter, Galli André

11:30–11:45: EPSC2018-881
Modeling the Evolution of the Acapulcoite-Lodranite parent body: An Insight into a Partially Differentiated Asteroid
Neumann Wladimir, Henke Stephan, Breuer Doris, Gail Hans-Peter, Trieloff Mario, Schwarz Winfried, Hopp Jens, Spohn Tilman

11:45–12:00: EPSC2018-740
Core dynamo in mantle-stripped asteroids
Formisano Michelangelo, Federico Costanzo, De Sanctis Maria Cristina, De Angelis Simone, Magni Gianfranco

12:00–12:15: EPSC2018-409
The Lagrangian SPH approach applied to the cometary gas-dust emission.
Pinto Luis Diego

12:15–12:30: EPSC2018-853
Transient exospheres and atmospheres in dwarf planets: SPH treatment with composite gas-dust plumes
Magni Gianfranco, Formisano Michelangelo

END OF ORAL PROGRAMME SB11/MD7

Outreach, Education and Policy

OEP6 Astrobiology Teaching, Outreach and Dissemination

Convener: Klara Anna Capova
Co-convener: Elias Chatzitheodoridis
Lecture Room: Saturn

08:30–10:15
Chairperson: Elias Chatzitheodoridis

08:30–08:45: EPSC2018-1270
Teaching Astrobiology in the modern classroom: a contemporary challenge and an opportunity for educators
Metaxa Margarita

08:45–09:00: EPSC2018-1014
Lessons learned from using Socratic Dialogue in astrobiology education
Persson Erik

09:00–09:15: EPSC2018-478
Danakil Depression: A natural laboratory as a vehicle for astrobiology outreach
Kokori Anastasia

09:15–09:30: EPSC2018-867
How did life begin? A unique opportunity for science outreach in the context of the GENESIS-SKA project
Zanazzi Alessandra, Boccato Caterina, Chinnici Ileana, Pastore Serena and the SKA-GENESIS

09:30–09:45: EPSC2018-900
The planetary "Grand Tour" in the Czech Republic
Petrasek Tomas, Nekola Novakova Julie

09:45–10:00: EPSC2018-956
Europplanet Outreach Video - "Astrobiology: Life in the Universe"
Barrosa Mariana

10:00–10:10: EPSC2018-658
Astrobiology and Society in Europe Today: The White Paper on the societal implications of astrobiology research in Europe and the need for a European Astrobiology Institute
Capova Klara Anna, Persson Erik, Milligan Tony, Duner David

10:10–10:15: Discussion

END OF ORAL PROGRAMME OEP6

OEP7 Policy Towards the International Lunar Decade & Planetary exploration outreach through Arts

Convener: Bernard Foing
Co-convener: Vidvuds Beldavs
Lecture Room: Neptune

16:15–18:00
Chairperson: Bernard Foing

16:15–16:30: EPSC2018-602
EarthMoonMars Village Update 2018
Foing Bernard and the EarthMoonMars Village Activities Organisers

16:30–16:45: EPSC2018-1260
Mapping Synergies: Sustainable Development Goals and Research & Technology in Space Architecture and Human Spaceflight
Van der Sanden Germaine, Foing Bernard

16:45–16:55: EPSC2018-905
Self Deployable Origami for MoonMars Architecture
Sitnikova Anna, Foing Bernard, Izotova Anastasia, Zaklinsky Alexander, Boon Samira, James Matthew, Sanden Germaine, Clavé Elise, Dubois Louis

16:55–17:05: EPSC2018-1244
Ben Horin Oded, Foing Bernard, Robberstadt Janne, van der Sanden Germaine

17:05–17:15: EPSC2018-1246
From Westworld to Moon World on Grindhouse Radio
James Matthew, Foing Bernard, Adragna Kim, Brimstone Will and the Westworld to Moon Grindhouse radio cast

17:15–17:30: EPSC2018-268
Towards the International Lunar Decade
Beldavs Vidvuds, Dunlop David, Crisafulli Jim, Foing Bernard
17:30–17:45: EPSC2018-1215
Fluid Bodies: From the Celestial to the Subatomic
Gelfand Dmitry, Domnitch Evelina

17:45–18:00: EPSC2018-633
Creating music from astronomical/planetary data:
Herschel/PACS data sonification of Haumea
Rengel Miriam, Ockert Matthias

END OF ORAL PROGRAMME OEP7
We look forward to welcoming you at

EPSC-DPS Joint Meeting 2019

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15–20 September 2019