

Daily programme for room Andalucia 3

Room Andalucia 3 | Sun, 18 Sep 2022

EP1 | Europlanet 2024 RI Council Meeting (by invitation only)

10:00–16:00 **Europlanet 2024 RI Council Meeting (by invitation only)**

Room Andalucia 3 | Mon, 19 Sep 2022

EXO1 | Formation, evolution, and stability of extrasolar systems

Conveners: Anne-Sophie Libert, Antoine Petit

Chairperson: Antoine Petit

Disc and tidal interactions

- 10:00–10:15 EPSC2022-464
Minimal viscosity discs lock pairs of giant planets in 2:1 resonance with stalled migration.
Philippine Griveaud, Aurélien Crida, and Elena Lega
- 10:15–10:30 EPSC2022-46
Calibrated Gas Accretion and Orbital Migration of Protoplanets in 1D Disc Models
Oliver Schib, Christoph Mordasini, and Ravit Helled
- 10:30–10:45 EPSC2022-1031
Observing the very early stages of the formation of a circumbinary planetary system in SVS 13
Guillem Anglada, Ana K. Diaz-Rodriguez, Guillermo Blázquez-Calero, Mayra Osorio, José F. Gómez, Gary A. Fuller, Robert Estalella, José M. Torrelles, Sylvie Cabrit, Luis F. Rodríguez, Enrique Macías, Carlos Carrasco-González, Luis A. Zapata, Itziar de Gregorio-Monsalvo, and Paul T. P. Ho
- 10:45–11:00 EPSC2022-303
Size and resonance diversity of multi-planet resonant chains is a natural outcome of their formation
Nader Haghighipour
- 11:00–11:15 EPSC2022-1198
Nonlinear tidal interactions in the convective envelopes of low-mass stars and giant gaseous planets
Aurélie Astoul and Adrian Barker
- 11:15–11:30 EPSC2022-703
A low-eccentricity migration pathway for a 13-h-period Earth analogue in a four-planet system
Luisa Maria Serrano

EPEC2 | EPEC General Assembly

Conveners: Ines Belgacem, Erica Luzzi

14:15–15:15 **EPEC General Assembly**

EXO1 | Formation, evolution, and stability of extrasolar systems

Conveners: Anne-Sophie Libert, Antoine Petit

Chairperson: Anne-Sophie Libert

Dynamical characterization

- 15:30–15:45 EPSC2022-954
A CHEOPS-enhanced view of the HD3167 system
 Vincent Bourrier and **Adrien Deline** and the CHEOPS and HARPS-N consortia
- 15:45–16:00 EPSC2022-1183
TOI-270 as a unique testbed for exoplanet formation & evolution
Maximilian N. Günther
- 16:00–16:15 EPSC2022-976
Offsets in Laplace resonances: The case of Kepler-80
Carolina Charalambous, Jean Teyssandier, and Anne-Sophie Libert
- 16:15–16:30 EPSC2022-169
New Python package to find, confirm, and characterize mean motion resonances
Mariah MacDonald

- 16:30–16:45 EPSC2022-200
Investigation of planetary systems of WASP, TrES, Qatar and Kepler projects by using transit photometry with O-C parameter tracking and TTV method application on Kyiv Comet Station
Anastasiia Nahurna, Mykhailo Solomakha, Mariia Lobodenko, and Olexandr Baransky
- 16:45–17:00 EPSC2022-720
An orbital stability-driven approach for the refinement of multi-planet systems' architectures
Manu Stalport, Jean-Baptiste Delisle, Stéphane Udry, Elisabeth Matthews, Vincent Bourrier, and Adrien Leleu

Coffee break

ODAA4 | Public engagement via live online astronomy events: Sharing experiences, looking ahead

Convener: Graham Jones | Co-conveners: Claudia Mignone, Helen Usher
 Chairperson: Graham Jones

- 17:30–17:40 EPSC2022-907
Il cielo in salotto: lessons learnt from livestreaming astronomical events in Italy
Federica Duras, Giulia Mantovani, Claudia Mignone, Livia Giacomini, Sandro Bardelli, Federico Di Giacomo, and Gianluigi Filippelli
- 17:40–17:50 EPSC2022-49
The CESAR educational special events: live coverage of solar events for public engagement
 Miguel Pérez-Ayúcar, Sandra Benitez Herrera, David Gonzalez, and **Joe Zender**
- 17:50–18:00 EPSC2022-1240
Using Live Feeds in the Classroom: A case study from a partial solar eclipse in cloudy Wales
Helen Usher and Scott Vaughan
- 18:00–18:10 EPSC2022-798
A museum carried into virtual medium: ISTEK Belde Schools Science Center
Mert Acar and Alper Ateş
- 18:10–18:20 EPSC2022-1099
An automated Astrophysics lab for everybody: the activities of the Astronomical Observatory of the University of Siena during two years of Covid-19 pandemic.
Alessandro Marchini
- 18:20–18:30 EPSC2022-1251
Dissemination of astrophysics from the IAA-CSIC on the internet: from dramatized video blogs to Twitch
Emilio José García Gómez-Caro

Room Andalucia 3 | Tue, 20 Sep 2022

EXOA2 | The hidden newly born planets

Convener: Antonio Garufi | Co-conveners: Paola Pinilla, Feng Long, Stefano Facchini, Farzana Meru

Chairpersons: Antonio Garufi, Paola Pinilla, Feng Long

- 10:00–10:10 EPSC2022-88
Extremely flat protoplanetary disks: a favorable environment for planetary growth
Marion Villenave
- 10:10–10:30 EPSC2022-259
Theoretical perspective on early planet formation
Joanna Drazkowska
- 10:30–10:50 EPSC2022-308 | **MI**
Inferring characteristics of the young planet population from high resolution protoplanetary disk imaging
Jane Huang
- 10:50–11:00 EPSC2022-461
The embedded giant protoplanets in HD 100546
Davide Fedele
- 11:00–11:10 EPSC2022-519
Planetesimal Formation (or Lack Thereof) in Pressure Bumps and Implications for Early Planet Formation
Jacob B. Simon and Daniel Carrera
- 11:10–11:20 EPSC2022-1137
A comparison of novel algorithms for unbiased recovery of extended disk signals with ADI - Application to the case of MWC 758 and its protoplanet candidates.
Valentin Christiaens, Benoit Pairet, Sandrine Juillard, Josh Calcino, and Clément Baruteau
- 11:20–11:30 EPSC2022-775
Hiding Signatures of Gravitational Instability in Protoplanetary Discs with Planets
Sahl Rowther, Rebecca Nealon, and Farzana Meru

Coffee break

EXOA4 | Interiors and Atmospheres of Rocky Planets: Formation, Evolution and Habitability

Convener: Paolo Sossi | Co-conveners: Kaustubh Hakim, Yamila Miguel, Gregor Golabek, Lena Noack, Tim Lichtenberg, My Riebe

Chairpersons: Paolo Sossi, Gregor Golabek

- 12:00–12:10 EPSC2022-627
Terrestrial Planet-Forming Giant Impacts from Asteroids to Super-Earths: A New Database and Initial Results
Erik Asphaug, Alexandre Emsenhuber, Saverio Cambioni, Travis Gabriel, Stephen Schwartz, and Robert Melikyan
- 12:10–12:20 EPSC2022-112
Moon formation and habitability in the circumplanetary habitable zone
Vera Dobos, Zoltán Dencs, and Zsolt Regály
- 12:20–12:30 EPSC2022-1146
Condensation path of the protolunar disk and the Earth's first atmosphere
Razvan Caracas
- 12:30–12:40 EPSC2022-866
Formation of primordial atmospheres for growing protoplanetary cores
Arijane Sommeregger

- 12:40–12:50 EPSC2022-964
Tracking CHNOS during the first stages of planet formation
Mark Oosterloo, Inga Kamp, and Wim van Westrenen
- 12:50–13:00 EPSC2022-149
The significance of intrusive volatile release for the Earth's atmosphere.
Sara Vulpius and Lena Noack
- 13:00–13:10 EPSC2022-1062
Helium partitioning between the mantle and the core at the early Earth
Ozge Ozgurel and Razvan Caracas
- 13:10–13:20 EPSC2022-506
Land/Ocean Surface Diversity on Earth-like (Exo)planets: Implications for Habitability
Tilman Spohn and Dennis Hoening
- 13:20–13:30 EPSC2022-129
Variation in outgassing efficiency for plate-tectonics vs. stagnant-lid planets under different evolving atmospheric conditions
Lena Noack and Caroline Brachmann

EPEC3 | Short course by EPEC: Science Communication

Conveners: João Retrê, Noah Jäggi

- 13:45–15:15 **Short course by EPEC: Science Communication**

EXO4 | Interiors and Atmospheres of Rocky Planets: Formation, Evolution and Habitability

Convener: Paolo Sossi | Co-conveners: Kaustubh Hakim, Yamila Miguel, Gregor Golabek, Lena Noack, Tim Lichtenberg, My Riebe
Chairpersons: Lena Noack, Tim Lichtenberg

- 15:30–15:50 EPSC2022-674 | **MI**
Atmospheric retrievals of terrestrial planets with future space missions
Eleonora Alei, Björn S. Konrad, Daniel Angerhausen, and Sascha P. Quanz and the LIFE collaboration
- 15:50–16:00 EPSC2022-283
The interior diversity of terrestrial-type exoplanets: constrained with devolatilized stellar abundances and mass-radius measurements
Haiyang Wang, Sascha Quanz, David Yong, Fan Liu, Fabian Seidler, Lorena Acuna, and Stephen Mojzsis
- 16:00–16:10 EPSC2022-1017
Exploring the effects of terrestrial exoplanet bulk composition on long-term planetary evolution
Rob Spaargaren, Maxim Ballmer, Stephen Mojzsis, and Paul Tackley
- 16:10–16:20 EPSC2022-1089
Mass-radius relation of intermediate-mass planets outlined by the hydrodynamic escape of planetary atmospheres and formation
Daria Kubyshkina and Luca Fossati
- 16:20–16:30 EPSC2022-418
Constraints on the existence of low-mass planets with supercritical hydrospheres
Hugo Vivien, Artyom Aguchine, Olivier Mousis, Magali Deleuil, and Emmanuel Marcq
- 16:30–16:40 EPSC2022-1007
Improving tidal modeling for rocky worlds
Alexandre Revol, Émeline Bolmont, Gabriel Tobie, Caroline Dumoulin, Yann Musseau, Stéphane Mathis, Antoine Strugarek, and Allan Sacha Brun
- 16:40–16:50 EPSC2022-380
Interior-atmosphere modelling of JWST rocky planets
Lorena Acuna Aguirre, Magali Deleuil, and Olivier Mousis

16:50–17:00 EPSC2022-1032

Eta Earth Revisited: How many Earth-like Habitats might there be in the Milky Way?

Manuel Scherf, Helmut Lammer, and Laurenz Sproß

Room Andalucia 3 | Wed, 21 Sep 2022

EXOAS5 | Devolatilization During Rocky (Exo)planet Formation: Mechanisms, Simulations, and Observations

Convener: Haiyang Wang | Co-conveners: Paolo Sossi, Joanna Drazkowska, Ramon Brasser, Amy Bonsor, Helmut Lammer, Sascha P. Quanz

Chairpersons: Haiyang Wang, Paolo Sossi

10:00–10:05 **Introduction**

Devolatilization (mechanisms, simulations and observations)

10:05–10:25 EPSC2022-999 | **MI**

Escape of moderately volatile elements from protoplanets and its potential effect on habitability

Manuel Scherf, Markus Benedikt, Nikolai Erkaev, Helmut Lammer, Oliver Herbort, Emmanuel Marcq, Peter Woitke, Petra Odert, Craig O'Neill, Daria Kubyskhina, and Martin Leitzinger

10:25–10:40 EPSC2022-1223

How do planetary bodies lose volatiles?

Marc Brouwers, Amy Bonsor, John Harrison, Oliver Shorttle, and Uri Malamud

10:40–10:55 EPSC2022-488

Connecting Stellar Abundance with Element Volatility & Rocky Planet Composition

Anina Timmermann, Ansgar Reiners, Andreas Pack, and Yutong Shan

10:55–11:10 EPSC2022-188

The effect of stellar composition on nebular condensation

Paolo Sossi and Haiyang Wang

11:10–11:25 EPSC2022-678

No universal devolatilization trend has been found for the solar system rocky bodies

Wen-Jou Lin, **Haiyang Wang**, Alison Hunt, and Sascha Quanz

Coffee break

Chairpersons: Joanna Drazkowska, Haiyang Wang

The reciprocal planet formation process and beyond

12:00–12:20 EPSC2022-316 | **MI**

The Evolution of Volatile Carbon During Planet Formation

Kamber Schwarz

12:20–12:35 EPSC2022-647

Altered Carbon : Destruction of carbon in protoplanetary disks using Monte Carlo simulations

Vignesh Vaikundaraman, **Joanna Drazkowska**, Fabian Binkert, Til Birnstiel, and Anna Miotello

12:35–12:50 EPSC2022-235

Influence of Early Formation Steps on Inner Planetary System Architecture and Composition: High-temperature dust boosts planetesimal formation

Tabea Bogdan, Cynthia Pillich, Joachim Landers, Heiko Wende, and Gerhard Wurm

12:50–13:05 EPSC2022-421

Phyllosilicates as a source of water in the Trappist-1 protoplanetary disk

Antoine Schneeberger and Olivier Mousis

13:05–13:20 EPSC2022-870

ExoPhot: Developing a new metric for measuring the fitness of photosystem activity in an exoplanetary environment.

Pablo Marcos-Arenal, Luis Cerdán, Mercedes Burillo-Villalobos, Nuria Fonseca-Bonilla, Juan García de la Concepción, Felipe Gómez, and José Antonio Caballero

13:20–13:30 **Discussion**

EPEC5 | Early Career Science Flash

Conveners: J. D. Prasanna Deshapriya, Noah Jäggi

14:15–15:15 **Early Career Science Flash**

EXO6 | Exoplanet observations, modelling and experiments: Characterization of their atmospheres

Convener: Olivia Venot | Co-conveners: Monika Lendl, Ingo Waldmann, Martin Turbet, Giuseppe Morello

Chairperson: Monika Lendl

Terrestrial planets

15:30–15:40 EPSC2022-742

Dune, Waterworld, and Everything in-between: Creating a Titan-like Climate on an Earth-like Planet**Matthew McKinney** and Jonathan Mitchell

15:40–15:50 EPSC2022-883

First exploration of the entire runaway greenhouse transition with a 3D global climate model**Guillaume Chaverot**, Emeline Bolmont, and Martin Turbet

15:50–16:00 EPSC2022-1110

3D Climate modelling of TRAPPIST-1 c with a Venus-like atmosphere and observational prospects**Diogo Quirino**, Gabriella Gilli, Thomas Navarro, Martin Turbet, Thomas Fauchez, Jérémy Leconte, and Pedro Machado

Sub-Neptunes

16:00–16:10 EPSC2022-904

Interior structure and possible existence of irradiated ocean planets**Artyom Aguichine**, Olivier Mousis, Magali Deleuil, Emmanuel Marcq, and Hugo Vivien

16:10–16:20 EPSC2022-25

Chemical diversity of the atmospheres and interiors of sub-Neptunes**Andrea Guzmán Mesa**

Hot Jupiters & Warm Saturns

16:20–16:30 EPSC2022-583

Constraining planet formation with atmospheric observations from the V1298 Tau planet system**Saugata Barat** and Jean-Michel Desert

16:30–16:40 EPSC2022-30

The transmission spectrum of WASP-17 b from the optical to the near-infrared wavelengths: combining STIS, WFC3 and IRAC datasets**Arianna Saba**, Angelos Tsiaras, Mario Morvan, Alexandra Thompson, Quentin Changeat, Billy Edwards, Andrew Jolly, Ingo Waldmann, and Giovanna Tinetti

16:40–16:50 EPSC2022-133

Ariel x NeurIPS Competition - Inferring Physical Properties of Exoplanets From Next-Generation Telescopes**Kai Hou Yip**, Quentin Changeat, Mario Morvan, Nikolaos Nikolaou, and Ingo Waldmann

16:50–17:00 EPSC2022-1057

Retrieval of molecular abundances and temperature-pressure profiles with high-resolution transmission spectroscopy in the near-infrared.**Paolo Giacobbe**

Coffee break

Chairpersons: Achrène Dyrek, Mathilde Poveda

17:30–17:40 EPSC2022-325

The rich chemistry of two warm-giant planets

Gloria Guilluy, Ilaria Carleo, Paolo Giacobbe, Alessandro Sozzetti, and Aldo Bonomo

17:40–17:50 EPSC2022-411

Transmission spectroscopy of the aligned hot Jupiter KELT-10b using HARPS

Michal Steiner, Omar Attia, David Ehrenreich, and Vincent Bourrier

17:50–18:00 EPSC2022-571

A CHEWIE first bite: the transmission spectrum of WASP-69b

Dominique Petit dit de la Roche and Monika Lendl

18:00–18:10 EPSC2022-29 | **MI**

Experimental Investigation of the Photochemical Production of Hydrocarbons in Warm Giant Exoplanet Atmospheres

Benjamin Fleury, Yves Benilan, Olivia Venot, Jeehyun Yang, Bryana Henderson, Mark Swain, and Murthy Gudipati

18:10–18:20 EPSC2022-763 | **MI**

Photochemical hazes dramatically alter temperature structure and atmospheric circulation in 3D simulations of hot Jupiters

Maria Steinrueck, Tommi Koskinen, Vivien Parmentier, Panayotis Lavvas, Xianyu Tan, and Xi Zhang

18:20–18:30 EPSC2022-697

CHEOPS Geometric albedo measurements of benchmark hot Jupiters

Andreas Krenn, Monika Lendl, and Alexis Brandeker

Room Andalucía 3 | Thu, 22 Sep 2022

EXO A8 | Connecting stellar high-energy phenomena with exoplanet observations

Conveners: Donna Rodgers-Lee, Gopal Hazra, Carolina Villarreal d'Angelo | Co-conveners: Maximilian Guenther, Gaitee Hussain, Katja Poppenhaeger

Chairperson: Donna Rodgers-Lee

Observations

10:00–10:15 EPSC2022-1011

On the study of atmospheric escape of exoplanets using the new window of the He 10830 line

Manuel López-Puertas, Manuel Lampón, Jorge Sanz-Forcada, Stefan Czesla, Alejandro Sánchez-López, Karan Molaverdikhani, Lisa Nortmann, Jaume Orell-Miquel, and The CARMENES Consortium

10:15–10:30 EPSC2022-266

Characterising the Effects of Active Host Stars on Exoplanet Transmission Spectra in Retrieval

Alexandra Thompson, Arianna Saba, Quentin Changeat, Giovanna Tinetti, Gianluca Cracchiolo, and Giuseppina Micela

Modelling

10:30–10:45 EPSC2022-1186

Stellar Flares and Habitable(?) Worlds from the TESS Primary Mission

Maximilian N. Günther

10:45–11:00 EPSC2022-1173

Signatures of star-planet interactions across the electromagnetic spectrum

Robert Kavanagh, Aline Vidotto, Harish Vedantham, Moira Jardine, Baptiste Klein, Joe Callingham, and Julien Morin

11:00–11:15 EPSC2022-1241

Non-LTE effects in atmospheres of warm and hot Neptunes: implications for the atmospheric mass loss

Daria Kubyskhina and Luca Fossati

11:15–11:30 **Discussion**

Coffee break

SB8 | Surface and interiors of small bodies, meteorite parent bodies, and icy moons: thermal properties, evolution, and structure

Convener: Wladimir Neumann | Co-conveners: Marco Delbo, Sabrina Schwinger

Chairpersons: Wladimir Neumann, Marco Delbo, Claudia Camila Szczech

Near Earth Asteroids

12:00–12:10 EPSC2022-159

Demystifying Near-Earth Asteroids

Bojan Novakovic, Marco Fenucci, Dusan Marceta, and Debora Pavela

12:10–12:20 EPSC2022-726

Non-impact origin of crater-like features on top-shape near-Earth asteroids

Laura M. Parro, Nair Trógolo, and Adriano Campo Bagatin

12:20–12:40 EPSC2022-1187 | **MI**

Thermal properties of asteroid Ryugu from global, local, and micro-scale and its formation scenario

Tatsuaki Okada, Satoshi Tanaka, Naoya Sakatani, Yuri Shimaki, Takehiko Arai, Hiroki Senshu, Hirohide Demura, Tomohiko Sekiguchi, Toru Kouyama, Masanori Kanamaru, and Takuya Ishizaki

12:40–12:50 EPSC2022-1044

Lifted particles from (65803) Didymos surface due to its fast rotation

Nair Trógolo, Adriano Campo Bagatin, Fernando Moreno, and Manuel Pérez Molina

- 12:50–13:00 EPSC2022-893
Shape, Compositional, and Thermophysical Properties of (1566) Icarus
Eric MacLennan, Karri Muinonen, Elizaveta Uvarova, Mikael Granvik, Emil Wilawer, Dagmara Oszkiewicz, and Joshua Emery
- Meteorite Parent Bodies and Planetesimal Evolution**
- 13:00–13:10 EPSC2022-977
Dependence of serpentinization efficiency on the initial conditions of planetesimal formation in the early Solar System
Anikó Farkas-Takacs and Csaba Kiss
- 13:10–13:20 EPSC2022-176 | **MI**
Temporally distributed accretion of chondritic and differentiated meteorite parent bodies in the C reservoir of the early solar system
Wladimir Neumann, Mario Triteloff, Ning Ma, and Audrey Bouvier
- 13:20–13:30 EPSC2022-666 | **MI**
New updates from ISSI project n° 485, Deciphering compositional processes in inner airless bodies of our Solar System
Francesca Zambon, Rosario Brunetto, Jean-Philippe Combe, Rachel Klima, Stefano Rubino, Katrin Stephan, Federico Tosi, Sebastien Besse, Oceane Barraud, Cristian Carli, Kerri Donaldson-Hanna, Katrin Krohn, Jacopo Nava, Giovanni Pratesi, and David Rothery
- Lunch break
- Chairpersons: Marco Delbo, Wladimir Neumann, Claudia Camila Szczech
- 15:30–15:40 EPSC2022-422
On the discovery of the main belt source of the enstatite chondrites.
Chrysa Avdellidou, Marco Delbo, Alessandro Morbidelli, Kevin Walsh, Edhah Munaibari, Jules Bourdelle de Micas, Maxime Devogele, Sonia Fornasier, Matthieu Gounelle, and Gerard van Belle
- Icy Moons, Large Primitive Asteroids, Comets**
- 15:40–15:50 EPSC2022-492
Model of the mineralogy of the deep interior of Triton
Camilla Cioria and Giuseppe Mitri
- 15:50–16:00 EPSC2022-609
Europa's ocean dynamics and its implication on the icy shell
Yosef Ashkenazy and Eli Tziperman
- 16:00–16:20 EPSC2022-11
Carbon-rich icy moons and dwarf planets
Bruno Reynard and Christophe Sotin
- 16:20–16:30 EPSC2022-242
(65) Cybele is the smallest asteroid at hydrostatic equilibrium, why?
Michaël Marsset, Miroslav Brož, Julie Vermersch, Nicolas Rambaux, Marin Ferrais, Matti Viikinkoski, Josef Hanuš, Emmanuel Jehin, Edyta Podlowska-Gaca, Przemyslaw Bartczak, Grzegorz Dudziński, Benoit Carry, and Pierre Vernazza
- 16:30–16:40 EPSC2022-175
Internal compositional structure of large primitive asteroids based on the photometric surveys
Eri Tatsumi, Julia de León, Faith Vilas, Marcel Popescu, Takahiro Hiroi, Sunao Hasegawa, David Morate, **Fernando Tinaut-Ruano**, and Javier Licandro
- 16:40–16:50 EPSC2022-107
Laboratory experiments on diffusion and sublimation of methane through ice dust layers to mimic cometary nucleus activity.
Carla Tamai, Belén Maté, Stéphanie Cazaux, and Miguel Ángel Satorre Aznar

16:50–17:00 EPSC2022-1065

Methanol ice structural changes due to thermal processing**Miguel Angel Satorre**, Carmina Santonja, Ramón Luna, Manuel Domingo, and Carlos Millán

Coffee break

SB7 | Laboratory measurements of returned Hayabusa2 samples, meteorites and planetary analogues

Conveners: Enrica Bonato, Lydie Bonal | Co-conveners: Gabriele Arnold, Eric Quirico, Jörn Helbert, Shogo Tachibana, Tomohiro Usui, T Nakamura

Chairpersons: Lydie Bonal, Enrica Bonato

17:30–17:35 **Introduction****Hayabusa2 samples**17:35–17:55 EPSC2022-1100 | **MI****Present status of initial descriptions and distributions of Ryugu samples returned by Hayabusa2****Toru Yada**, Masanao Abe, Kasumi Yogata, Akiko Miyazaki, Kentaro Hatakeda, Yuya Hitomi, Yuka Sugiyama, Masahiro Nishimura, Kanako Sakamoto, Rei Kanemaru, Kazuya Kumagai, Hiromichi Soejima, Aiko Nakato, Tatsuaki Okada, Ryota Fukai, Haruna Sugahara, Takuya Ishizaki, Shino Suzuki, Shogo Tachibana, and Tomohiro Usui and the ONC-T team and IAS team17:55–18:10 EPSC2022-898 | **MI****NIR Hyperspectral Imaging of Hayabusa 2 Returned Samples by the MicrOmega Microscope within the ISAS Curation Facility**Damien Loizeau, Cédric Pilorget, Jean-Pierre Bibring, Tatsuaki Okada, Rosario Brunetto, Toru Yada, Lucie Riu, Tomohiro Usui, Kentaro Hatakeda, Aiko Nakato, Kasumi Yogata, Masanao Abe, Alice Aleon-Toppani, Donia Baklouti, **John Carter**, Yves Langevin, Celine Lantz, and Tania Le Pivert-Jolivet and the MicrOmega Hayabusa 2 Curation Team18:10–18:25 EPSC2022-1131 | **MI****Thermal history of Ryugu based on Raman and IR characterization of Hayabusa2 samples****Lydie Bonal**, Eric Quirico, Gilles Montagnac, Mutsumi Komatsu, and Hikaru Yabuta and the The Hayabusa2-initial-analysis IOM team

Room Andalusia 3 | Fri, 23 Sep 2022

OPS4 | Jupiter and Giant Planet System Science: New Insights From Juno

Convener: Scott Bolton | Co-conveners: Yamila Miguel, Yasmina M Martos, Corentin Louis, Stavros Kotsiaros, Kimberly Moore
Chairperson: Yamila Miguel

- 10:00–10:10 EPSC2022-980
The oscillatory motion of the polar cyclones of Jupiter results from vorticity dynamics
Nimrod Gavriel and Yohai Kaspi
- 10:10–10:20 EPSC2022-1004
Revisiting the Jupiter wind-induced gravity field: high harmonics and surface gravity
Yohai Kaspi, Eli Galanti, Ryan Park, Daniele Durante, Luciano Iess, Marzia Parisi, and Dustin Buccino
- 10:20–10:30 EPSC2022-1006
JWST MIRI Mapping of Jupiter's Great Red Spot: Preparatory Data Simulations
Jake Harkett, **Leigh Fletcher**, Henrik Melin, Mike Roman, Oliver King, Heidi Hammel, Stefanie Milam, Pat Fry, and Tommy Greathouse
- 10:30–10:40 EPSC2022-1061
Vortex Statistics in the Saturn DYNAMICO GCM: Manual and Automated Detection
Padraig Donnelly, Aymeric Spiga, Sandrine Guerlet, Matt James, and Deborah Bardet
- 10:40–10:50 EPSC2022-1103
Jupiter's Equatorial Atmosphere Observations
Arrate Antunano, Leigh N Fletcher, Glenn S Orton, Henrik Melin, Padraig T Donnelly, Michael T Roman, James A Sinclair, Yasumasa Kasaba, Thomas Momary, and Takuya Fujiyoshi
- 10:50–11:00 EPSC2022-1124
Long-Baseline Observations with JunoCam
Gerald Eichstädt, Glenn Orton, and Candice Hansen-Koharcheck
- 11:00–11:10 EPSC2022-1156
Remote sensing Saturn's global plasma dynamics: testing the relationship between Saturn's ENA and narrowband SKR emissions.
Joe Kinrade, Sarah Badman, Chris Paranicas, Caitriona Jackman, Diego Moral Pombo, Elizabeth O'Dwyer, Corentin Louis, and Alexander Bader
- 11:10–11:20 EPSC2022-1192
Juno magnetometer observations constrain Jupiter's dynamo, interior state, deep zonal flow, and planetary rotation rate.
Jack Connerney, Sidey Timmins, John Jorgensen, Stavros Kotsiaros, Peter Jorgensen, Jose Merayo, Matija Herceg, Jeremy Bloxham, Kimberly Moore, Scott Bolton, and Steven Levin
- 11:20–11:30 EPSC2022-1215
First Steps Towards a New Saturn Ionosphere Model Including Ring-Planet Coupling and Electrodynamics
Omakshi Agiwal, Luke Moore, Carlos Martinis, Ingo Mueller-Wodarg, and Joe Huba

Coffee break

OPS5 | Outer Planet Moons: Environments and Interactions

Convener: Shahab Fatemi | Co-conveners: Audrey Vorburger, Lorenz Roth, Elias Roussos, Krishan Khurana
Chairpersons: Shahab Fatemi, Audrey Vorburger, Elias Roussos

- 12:00–12:10 EPSC2022-143
A current picture of neutral tori at outer planetary systems: unique insight into moon-magnetospheric interactions
howard smith, Jamey Szalay, Ryoichi Koga, Robert Johnson, and Fuminori Tsuchiya

- 12:10–12:25 EPSC2022-702
Water-group pickup ions from Europa-genic neutrals orbiting Jupiter
Jamey Szalay, Todd Smith, Eric Zirnstein, David McComas, Luke Begley, Fran Bagenal, Peter Delamere, Robert Wilson, Phil Valek, Andrew Poppe, Quentin Neron, Frederic Allegrini, Robert Ebert, and Scott Bolton
- 12:25–12:35 EPSC2022-290
Pitch angle distributions (PADs) near the Galilean moons of Jupiter: Galileo flybys revisited
Norbert Krupp, Elias Roussos, Peter Kollmann, Chris Paranicas, George Clark, and Krishan Khurana
- 12:35–12:45 EPSC2022-212
Europa's interaction with the Jovian magnetosphere: insights from the Galileo flybys
Juan Sebastian Cervantes Villa and Joachim Saur
- 12:45–12:55 EPSC2022-2
Effect of the Magnetospheric Plasma Interaction and Solar Illumination on Ion Sputtering of Europa's Surface Ice
Peter Addison, Lucas Liuzzo, and Sven Simon
- 12:55–13:05 EPSC2022-635
3D Monte-Carlo Simulation of Ganymede's Water-Related Exosphere
Audrey Vorburger, Shahab Fatemi, André Galli, Shane Carberry Mogan, Lorenz Roth, and Peter Wurz
- 13:05–13:15 EPSC2022-282
Energetic particle fluxes onto Callisto's atmosphere
Lucas Liuzzo, Andrew Poppe, Peter Addison, Sven Simon, Quentin Neron, and Chris Paranicas
- 13:15–13:25 EPSC2022-812
Organic chemistry on the surface of jovian icy satellites: formation of complex refractory organic matter by implantation of sulfur ions into water-alkanes ices
Alexis Bouquet, Grégoire Danger, Laura Tenelanda-osorio, Philippe Boduch, Hermann Rothard, Julien Maillard, Isabelle Schmitz-Afonso, Carlos Afonso, Philippe Schmitt-Kopplin, Fabrice Duvernay, Cintia Pires da Costa, and Lawry Honold

EPEC6 | Short course by EPEC: Academic Mental Health: Towards Improving Research Culture

Conveners: Zoë Ayres, Indhu Varatharajan, Noah Jäggi

13:45–15:15 **Short course by EPEC: Academic Mental Health: Towards Improving Research Culture**

OPS5 | Outer Planet Moons: Environments and Interactions

Convener: Shahab Fatemi | Co-conveners: Audrey Vorburger, Lorenz Roth, Elias Roussos, Krishan Khurana

Chairpersons: Audrey Vorburger, Shahab Fatemi, Elias Roussos

- 15:30–15:45 EPSC2022-645 | **MI**
JUICE (Jupiter Icy Moon Explorer): September 2022 status report
Olivier Witasse and the the JUICE Teams
- 15:45–15:55 EPSC2022-681
The Particle Environment Package (PEP) for the JUICE mission: Ready to go!
Stas Barabash, Pontus Brandt, and Peter Wurz and the PEP Team
- 15:55–16:05 EPSC2022-838
The Radio and Plasma Wave Investigation (RPWI) for the JUPITER ICy moons Explorer (JUICE)
Jan Bergman and Jan-Erik Wahlund
- 16:05–16:15 EPSC2022-117
Investigating Jovian Radiation Environment by the Europa Clipper Mission
Insoo Jun, Chris Paranicas, and Richard Meitzler
- 16:15–16:25 EPSC2022-37 | **MI**
A NASA New Frontiers Mission Concept to Io
Alfred McEwen, Lynn Carter, Daniella DellaGiustina, Laszlo Kestay, Brett Denevi, Amanda Haapala, Joseph Westlake, Ryan Park, Krishan Khurana, Nicolas Thomas, Peter Wurz, and Joern Helbert

- 16:25–16:35 EPSC2022-1015
On the Potential Hydrodynamic Loss of Water Vapor During Accretion of the Galilean Satellites
William B. McKinnon and Kevin J. Zahnle
- 16:35–16:45 EPSC2022-732
Red Streaks on Tethys: Evidence for Recent Activity
Paul Schenk, Bonnie Buratti, Roger Clark, Paul Byrne, William McKinnon, Isamu Matsuyama, Francis Nimmo, and Francesca Scipioni

Coffee break

SB8 | Surface and interiors of small bodies, meteorite parent bodies, and icy moons: thermal properties, evolution, and structure

Convener: Wladimir Neumann | Co-conveners: Marco Delbo, Sabrina Schwinger

Chairpersons: Wladimir Neumann, Marco Delbo

Surfaces and Regolith

- 17:30–17:40 EPSC2022-376
Thermal Conductivity of Granular Media and its Dependence on Volume Filling Factor
Katharina Lammers, Bastian Gundlach, and Jürgen Blum
- 17:40–17:50 EPSC2022-1005
Space and High-Irradiance Near-Sun Simulator (SHINeS)
Georgios Tsirvoulis, Mikael Granvik, and Athanasia Toliou
- 17:50–18:00 EPSC2022-795
The crater-induced YORP effect
Wen-Han Zhou, Yun Zhang, Xiao-Ran Yan, and Patrick Michel
- 18:00–18:10 EPSC2022-913
Ejecta Generated by Ultra Slow Impacts on Regolith Surfaces in Low Gravity
Kolja Joeris, Matthias Keulen, Laurent Schönau, and **Jonathan E. Kollmer**
- 18:10–18:20 EPSC2022-910
What can we learn from an in-situ accelerometer during surface interactions?
Naomi Murdoch, Alexia Duchêne, Javier Segovia-Otera, Melanie Drilleau, Alexander Stott, and Cecily Sunday