

Division Meeting Planetary and Solar System Sciences (PS)

Anezina Solomonidou (President 2023-2027) April 16, 2023,12:45-13:45

https://www.egu.eu/ps/home/



WELCOME



Agenda

- Welcome
- PS important events
- Facts and figures about EGU GA 2024
- Union & PS division awardees (and call for nominations)
- OSPP competition (celebration at Annual Dinner, Thursday)
- Structure of the PS Science Team (2024-) and ECS cohort
- AOB and Member comments
- PS diVISION
- Adjourn



PS Social Events @EGU24

PS Annual Dinner REGISTRATION REQUIRED

Thursday 18/4, 19:30: PS Annual Dinner @Griechenbeisl Vienna's oldest restaurant founded in 1447 (limited seating up to 60 people)

ECS EVENTS

Sunday 14/4, 18:30: PS Annual social and ECS meet-up 'The Planetary Birl' @Philosoph Bier Beisi Monday 15/4, 12:30-14:00: Joint ST/PS/EMRP networking picnic, location TBC, everyone should bring their own picnic

Tuesday 16/4: ECS Networking Reception (union-wide event), Rooftop Foyer, 18:00 - 19:30.

AWARDS

Tuesday 16/4, 19:00-20:00: PS Awards, David Bates Medal Lecture by Franck Montmessin and PS Division Outstanding ECS Award Lecture by Lucia Mandon, Room E2

Thursday 18/4, 12:45-13:45: Jean Dominique Cassini Medal Lecture by Veronique Dehant, Room E1

ANGEO CELEBRATION

Tuesday 16/4, 19:00-20:00, Room E2



PS Splinter Meetings



The nature of martian moons: Phobos and Deimos, Room 2.97 Convener: Chryssa Avdellidou, ca337@leicester.ac.uk



Wednesday 17/4, 19:00-20:00: Splinter Meeting 92 (SPM92)

Missions to Giant Planets and their Ocean Worlds, Room 2.97 Convener: Anezina Solomonidou, anezina.solomonidou@hsc.gov.gr









EGU24: News from the EGU Programme Committee

- EGU Programme Committee has two Co-chairs, appointed by the EGU Council.
 They are supported by an Events Manager staff member from EGU office
- Programme Committee: comprised of General Positions (Executive Board, Conference Organizer, PC Co-chairs), and Programme Group Chairs (25 Programme Groups reflecting the 22 EGU Divisions with their science officers, and SC, ITS, EOS programmes)
- Our goal: to offer a reliable, hybrid format of the General Assembly with flexibility to respond to any emerging needs, as inclusive and environmentally friendly as possible, while responding to the main scientific challenges of geosciences worldwide



Maria-Helena Ramos PROGRAMME COMMITT

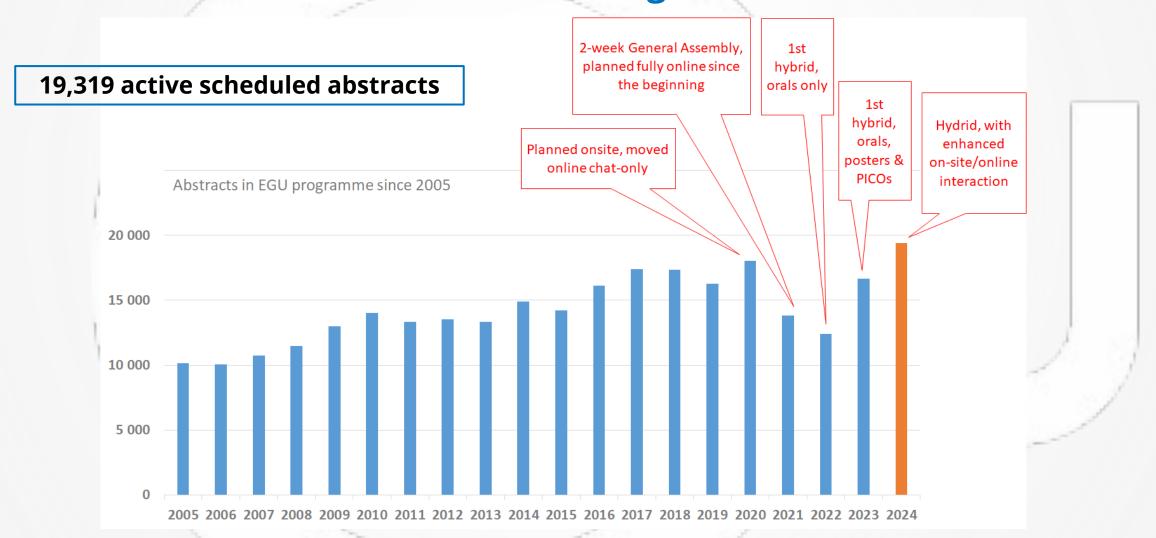


Athanasios Nenes
PROGRAMME COMMITTEE
CO-CHAIR



Jane Roussak EVENTS MANAGER

EGU24: numbers at a glance (as of 29 March 2024)







EGU23 main entrance Photo credit: Pfluegl 2023

EGU24: numbers at a glance (as of 4 April 2024)

- 19,319 active scheduled abstracts
- 16.746 paid registrations (8% for virtual participation)
- 50% of virtual participants benefited from free registration (Undergraduate/master students & Low- & lower-middle income countries)
- 37% of on-site participants and 52% of virtual participants are PhD candidates, Master or Undergraduate students
- 2% of on-site participants and 24% of virtual participants are from
 Low & Lower-middle income countries
- Gender (Female / Male / Non-binary): On-site (39% / 58% / 0%)
 & Virtual (42% / 54% / 1%)
- 112 different countries for on-site participation; 90 for virtual participation

Compare with statistics of previous GAs: https://www.egu.eu/meetings/general-assembly/meetings/

EGU24: numbers at a glance (as of 4 April 2024)





EGU24: numbers at a glance (as of 29 March 2024)

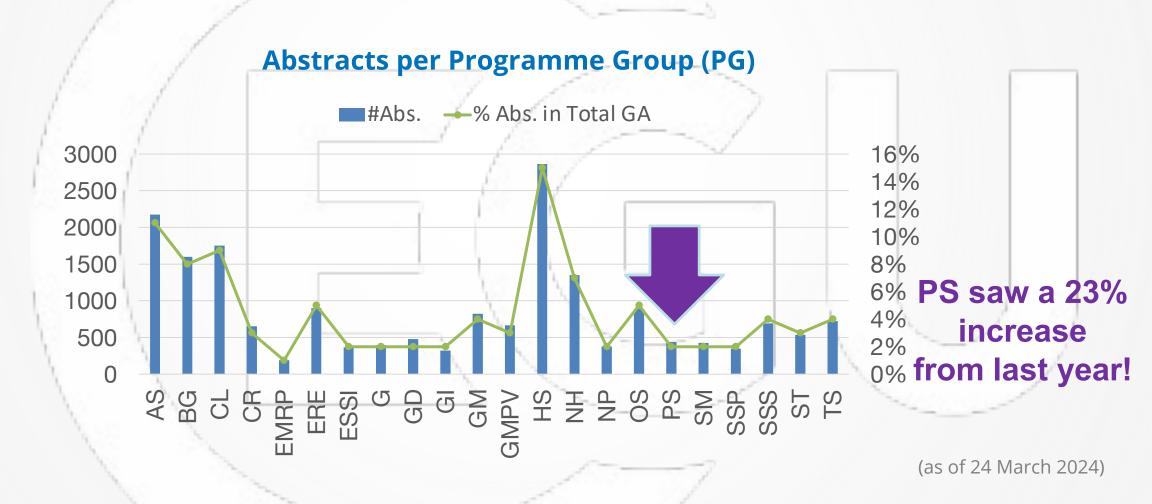
- 1,025 active sessions (+11% EGU23):
 - 675 division-led sessions, of which 42 are ITS sessions
 - 17 Education and Outreach Sessions (EOS) + GIFT workshop
 - 61 Short Courses + 2 Artist in Residence workshops
 - 39 Medal and Award Lectures
 - 6 Union Symposia and 10 Great Debates
 - 152 Townhall & Splinter meetings scheduled
- ECS Networking, Science for Policy, and EDI Committee events



EGU23 oral presentationPhoto credit: Pfluegl 2023



EGU24: numbers at a glance



EGU24: numbers at a glance

Abstracts per (lead) session in each Programme Group



(as of 24 March 2024)

Head on over to the EGU Booth!

- Learn about EGU activities
- Meet members of the EGU Council & Committees
- Cast your vote for the photo competition
- Browse through EGU merchandise... and more!





Join a Science for Policy Session at EGU24!

Find out how you can more effectively engage with policymakers and how your research can have policy impact

EGU's Science for Policy Help Desk Every day, 12:00-13:00 at the EGU booth

See the full EGU24 Science for Policy Programme







EGU Outreach Committee

Consisting of 11 volunteers contributing to the Union through the following aims:

- Training geoscientists in outreach, public engagement, and science communication
 Free online workshops, Education & Outreach Sessions (EOS), Awards lectures...
- Facilitating geoscientists to do outreach and public engagement
 Public Engagement Grants, Geoscience Days, Teacher-Scientist Pairing, EGU Public Lecture...
- Developing relationships between geoscientists and journalists / media
 Science Journalism Fellowship, Angela Croome Award...
- Fostering the mentoring culture across EGU
 Joint with Equality Diversity & Inclusion Committee and Early Career Scientist Representatives

Come to the EGU booth to find out more.



Union Awards - Outreach

The EGU has several awards celebrating excellent practices that complement purely scientific achievements:

- Angela Croome Award for Earth, space and planetary sciences journalism
- Champion(s) for Equality, Diversity and Inclusion Award for significant contributions in advancing the values of EDI in the geoscience community
- Katia and Maurice Krafft Award for Geoscience outreach and engagement

Please **consider nominating** your colleagues / journalists you have worked with who may be worthy recipients of these awards. Attend the Award Lectures to see the excellent practice being celebrated this year.





Equality, Diversity, and Inclusion (EDI) at EGU24

NEW:

Dedicated programme category compiling EDI sessions of interest!





We are committed to providing a safe, open, accessible, and respectful General Assembly as per the EGU Code of Conduct.

Any behaviour that is disrespectful or violates the Code of Conduct can be reported to the designated Person(s) of Trust

- by emailing conduct@egu.eu
- or on-site, 8:00-17:00 at the EGU Info Desk (Yellow level Foyer)

More information available at https://www.egu24.eu/about/egu_general_assembly_rules_of_conduct.html



Art-Science offerings at EGU24

EGU24 Artists in Residence

visit their booths in Foyer D!

Ilias Tsagas

Poet



Lucía Pérez-Díaz





Art-Science sessions at EGU24:

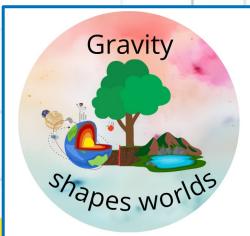




EGU24 artists raising awareness of EDI in the Geosciences

learn more at their booth in Hall X2!

Nkosingiphile Mazibuko
Iziko Museums of South Africa



Childcare Art Exposition



growing gallery located in entrance of Hall X1

Divisions represented: **G, GD, PS**

EGU 2024 Participants receive a **discount** of 50 % on the entrance fee if wearing their name badge

50 % :
DISCOUNT
April 13
21



The world's oldest and largest meteorite exhibition

...and much more!





The Daily Newsletter at the General Assembly

EGU TODAY IS NOW DIGITAL!





All issues of the newsletter will be made available at

www.egu.eu/egutoday/

through the conference app and on screens inside the ACV.

Did you know the EGU has a monthly newsletter?





The email newsletter informs EGU members about

- EGU NEWS AND BLOGS
- GENERAL ASSEMBLY UPDATES
- HIGHLIGHTS FROM EGU JOURNALS
 - JOBS AND MEETINGS

and much more!





Open Access Publications



- Open Access Journals
- Interactive Public Peer Review

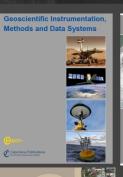






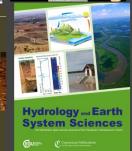
GEOSCIENCE

COMMUNICATION













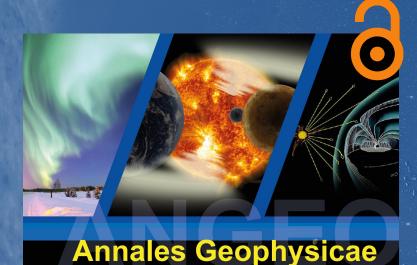




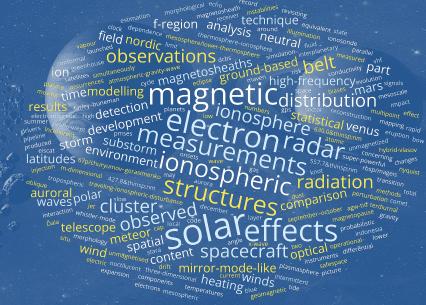


100% open access and publicly peer reviewed since 2018!





A community-driven journal that in 2023* published extensive, exciting new research on:



EGU European Cop Cop The In



"ANGEO is one of the most relevant journals focusing on the interface between aeronomy and solar-terrestrial physics."

Gunter Stober, author 2023 doi.org/10.5194/angeo-41-197-2023

Key Journal Metrics:

Impact Factor (2022): **1.9**

5-year Impact Factor (2022): **1.8**

Papers published in 2023: **37**

Number of countries where authors were based in 2023:

Number of countries where editors were based in 2023:

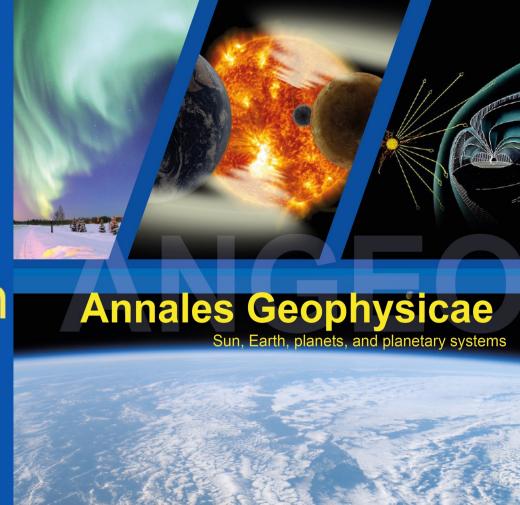


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for a great 40 years.

Reception: room E2 on Tuesday, 16 April at 20:00





















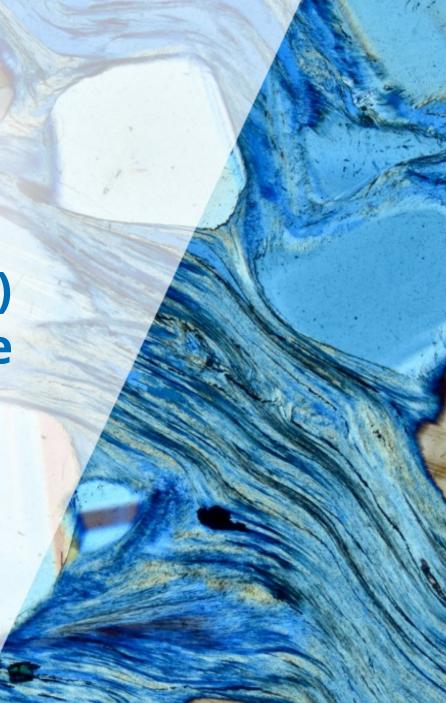


Great Debate 4

Early Warnings for All (EW4ALL)
Initiative: science needs for the
global ambition to protect
everyone by 2027

Thursday 18 April, 10:45–12:30 CEST Room E1

#EGU24





Great Debate 6

If informing is not enough, how should scientists engage to accelerate the social transformation required by climate change and biodiversity collapse?

Friday 19 April, 14:00-15:45 CEST

Room E1

#EGU24







Wednesday 17 April, 17:30-19:30 CEST



2024 Jean Dominique Cassini Medal

The 2024 Jean Dominique Cassini Medal & Honorary Membership is awarded to Veronique Dehant for her major discoveries and ground-breaking research in the field of planetary science and geodesy, and outstanding contribution to international space missions.

Thu, 18 Apr, 12:45–13:45 (CEST) Room E1

Veronique Dehant



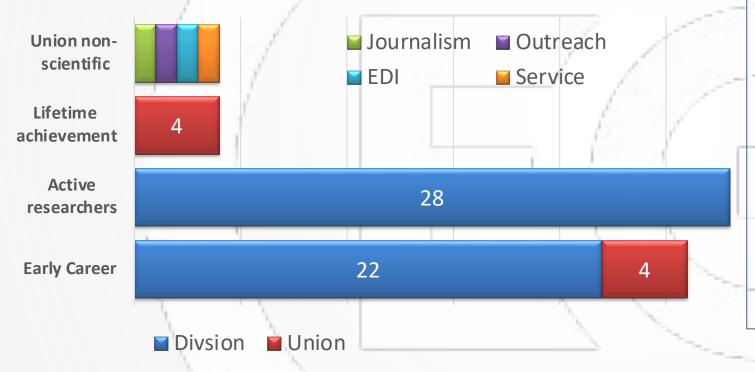








EGU features an extensive awards and medals programme on all career stages



- 4 Union Awards for services for the union, science journalism, outreach, and EDI
- 4 prestigious Union Medals, recognising excellence in scientific research
- 28 Division Medals, awarded for significant disciplinary contributions in Earth, planetary and space sciences
- 4 Union and 22 Division Awards for Outstanding Early Career Scientists



How to become an awardee? Nominations are exclusively by EGU members (no self nomination)*

Candidates do not need to be EGU members. Individual award and medal committees are then evaluating the nominations selecting the most deserving candidate based on scientific achievements**.

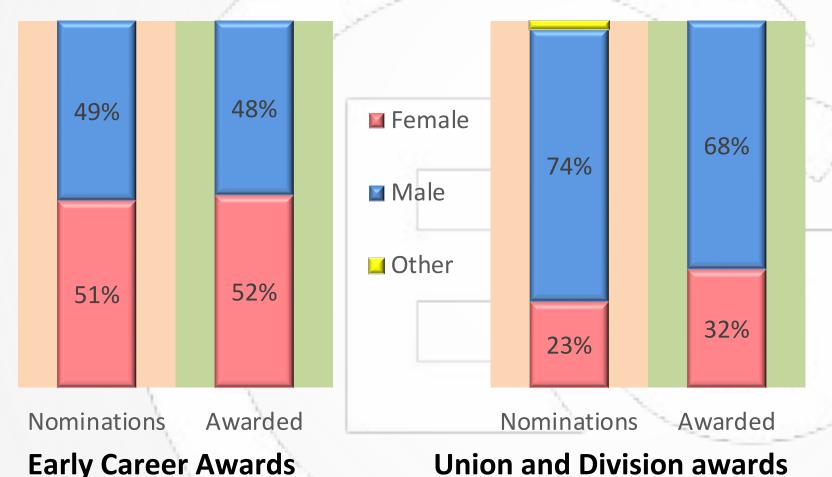
^{*} An exception is one award to promote excellence in journalism allowing nominations from non-members and self nominations

^{**} plus one medals each for journalism, outreach and service to the union

EGU awards & medals



Some statistics for the 2024 awards



More information on awards

EOS3.1
Poster EGU24-1620
Equality of
opportunities in
geosciences: The EGU
Awards Committee
experience
Wed, 17 Apr, 10:45–
12:30
Hall X1 | X1.63

Meet the chair of the Awards Committee Mon, 15 Apr, 17:30–

18:00 EGU booth – Hall

X2 38

EGU awards & medals



How to nominate

Where: https://www.egu.eu/awards-medals/nominations/

When: Deadline is June 15 every year

What is required:



	Division and Union medals	Outstanding Early Career Scientists Awards
Nomination letter	5000 characters (including spaces)	2500 characters (including spaces)
Curriculum Vitae	2 pages	1 page
Selected bibliography	2 pages	½ page
Supporting letters	3-5 5000 characters (including spaces)	None (multiple nominators possible)

Nomination and supporting letters via on-line form



Planetary and Solar System Sciences ((Awards & Medals (

2024 David Bates Award

The 2024 David Bates Medal is awarded to Franck Montmessin for his key contributions to understanding the water cycle on Mars and his innovative instrumental development work.







2024 Division Outstanding Early Career Scientist Award

The 2024 Division Outstanding Early Career Scientist Award is awarded to Lucia Mandon for remarkable contributions to planetary science, specifically by characterising the mineralogy and alteration, with infrared spectroscopy, of the Jezero crater explored by the Mars2020 mission.

TONIGHT! Tuesday 16/4, 19:00-20:00 Room E2:

Lecture by Lucia Mandon







OSPP

Outstanding Student and PhD candidate Presentation contest

OSPP coordinator: Lena Noack

Kristian Chan

2024 OSPP Awardee

2024 Outstanding Student and PhD candidate Presentation Award for his presentation on:

RIME-REASON Synergistic Opportunities for Surface and Near-surface Investigations of Icy Moons





A. Purpose

RIME-REASON Synergistic Opportunities for Surface and Near-surface Investigations of Icy Moons

Kristian Chan, Cyril Grima, Christopher Gerekos, and Donald D. Blankenship Institute for Geophysics, University of Texas at Austin, Austin, Texas, United States







kristian.chan@utexas.edu

We assess the use of multi-frequency/bandwidth radar reflectometry for characterizing the near-surface* properties of icy moons in the context of rough surfaces.

This approach can be used to investigate processes that influence the near-surface composition and structure (layer thickness and porosity).

The coherent surface return from the Radar for Icy Moons Exploration (RIME) on ESA's Jupiter Icy Moons Explorer (JUICE) mission and the Radar for Europa Assessment and Sounding: Ocean to Near-surface (REASON) on NASA's Europa Clipper mission is sensitive to bulk near-

Radar system	Mission	Center frequency	Bandwidth	Vertical resolution in io $(\varepsilon = 3.15)$
REASON	Europa Clipper	9 MHz 60 MHz	1 MHz 10 MHz	85 8.5
RIME	JUICE	9 MHz	1 MHz 2.8 MHz	85 30
Factor	Asteons		*The near-s	

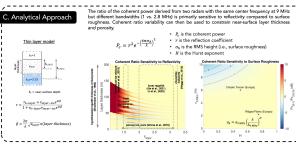
The <u>footprint</u> is governed by the signal bandwidth and spacecraft altitude.

The <u>near-surface</u> depth is governed by the signal bandwidth and permittivity (e), the latter which depends on near-surface structure and composition.

Ballemonia Chem et al., 2022; Coreino et al., 2010; Orina et al., 2014; Orina et al., 2015; Tinggy et al., 2012; Ju et al., 2021; Kofman et al., 201 Li et al., 2022; Monre et al., 7979; Mauginot et al., 2007; Salgmonet et al., 2022; Shapand et al., 2021 Adapointégrame. Does not include ground tracks during orbital phase of JUICE around Garymeds

Does not include ground tracks during orbital phase of JUICE around Garymeds

Dispute of the Control of the



Radar scattering simulations of both proxy an

kadar scattering simulations of both proxy and observed surface roughness will be performed across altitudes and bandwidths to validate uncertainties in the analytical approach for discriminating near-surface layering described above.

The model is based on the multilayer Stratton-Chu coherent simulator (Gerekos et al., 2018) modified to incorporate scattering contributions from all frequencies contained within the radar chirp.

The Radar Statistical Reconnaissance method (Grima et al., 2014) will be used to derive $P_{\rm c}$ from simulation results.

	Surface 1	Surface 2	
	[9/1 MHz]	[9/1 MHz]	[9/2.8 MHz]
Sim. # 1	1	1	✓
	:		
C: #1000	,	,	,

<u>Case 1</u>: RIME and REASON crossovers, which might not share the same footprint

- relevant for producing a homogenous radiometric dataset for complementary [9/1 MHz] radar measurements across the icy Galilean moons
 investigate the use of bandwidth filtering of RIME [9/2.8 MHz] for calibration with REASON [9/1 MHz]
- for calibration with REASON [9/1 MHz]

 ase 2: RIME [9/2.8 MHz] ground tracks, where footprints share the
- same scattering characteristics as REASON [9/1 MHz] intersections
 assess the coherent ratio sensitivity to surface roughness and
 reflectivity
- reflectivity
 investigate the use of bandwidth filtering to produce multiple
 sets of observations along RIME [9/2.8 MHz] ground tracks





Cas

- = 2.8 MHz bandwidth



OSPP: Outstanding Student and PhD candidate Presentation contest



OSPP contest at EGU

- highlights poster and PICO presentations
- since 2003 (initiated by HS, PS included since 2010)
- 1 per ~30 participants awarded (~2300 participants)
- 2023: 28 participants, 2024: 49 participants in PS

Who can participate?

- first and presenting author
- either currently a BSc or MSc student or PhD candidate
- or last degree obtained in year of GA

Who votes?

- 3 pre-defined judges per participating presentation
- ALL EGU participants (from post-doc level on, not co-author, no shared affiliation) can vote as well on abstract page!
- WE NEED YOU!!!

What is evaluated?

- scientific content (relevance, methods, ...)
- presentation (organization, aesthetic appeal, ability to answer questions, ...)

Why participate?

- Better visibility for your research
- Award certificate and ceremony
- Free open-access publication in one of the EGU journals
- Conference fee waiver for next EGU





Division Officers '23-'24

Structure



Tristan Guillot OCA, France











SO: Small Bodies















PS PLANETARY AND SOLAR SYSTEM SCIENCES

Outgoing officers 2024

Structure



SO: Terrestrial Planets Steve Mojzsis Sébastien Charnoz IPGP, France











ECS Advisor



We are very grateful for your service and support to the PS division. Thank you!!!

PS PLANETARY AND SOLAR SYSTEM SCIENCES

Structure

Incoming officers 2024

Division Vote by show-of-hands







Montmessin

U Paris-Saclay, France



SO: Small Bodies





SO: Outer Planets



policy@egu.eu

PS PLANETARY AND SOLAR SYSTEM SCIENCES

Structure

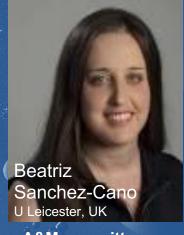
PS Awards & Medal Committees 2024+



A&M Chair



A&M committee



A&M committee



Outgoing Thank you!







Outgoing Thank you!

Incoming



A&M committee



President

Deputy President

PS Programme Group Chair

Science Officers

Anezina Solomonidou (2023-2027)

Joana Oliveira

Anezina Solomonidou

Joana Oliveira
Terrestrial Planets

Franck Montmessin Terrestrial Planets

Chrysa Avdellidou Small Bodies

Moa Persson
Space weather & space weathering

Panayotis Lavas
Outer Planets

Tristan Guillot
Outer Planets

Tim Lichetnberg Astrobiology

Emeline Bolmont Exoplanets

Awards & Medals Chair
Awards & Medals Committee

Chrysa Avdellidou Beatriz Sanchez-Cano Franck Montmessin Sebastian Charnoz

OSPP Coordinator

ECS Representative ECS Co-Representative

Social Media Manager Policy Officer

Lena Noack

Tristan Guillot

Georgia Moutsiana

TBD

TBD

TBD





A big THANK YOU

to all PS Officers, Conveners, Volunteers, Authors, Attendees

our division 2024 - 2025

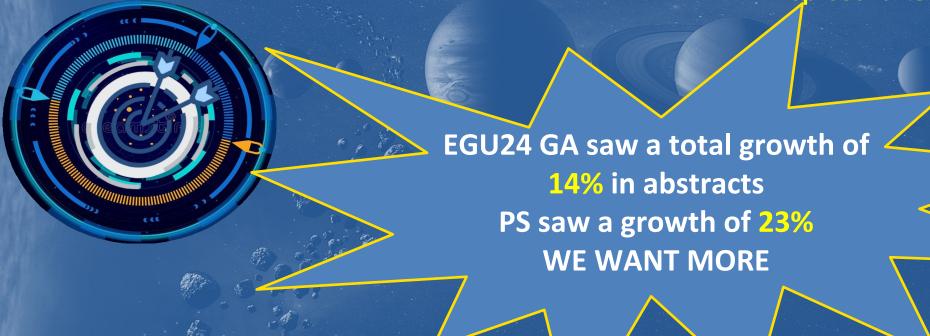




part of EGU's identity 'the planetary and space science research'

MAIN Goal to accomplish: GROWTH

Increase attendance for PS within EGU Represent PS within EGU









- ✓ RECOGNITION (be eligible for nomination, nominate colleagues)
- ✓ ACTIVE ROLE

PostDocs and PhD Students:

- ✓ FUNDING opportunities for conferences and meetings
- ✓ MAKE A DIFFERENCE WITH NEW IDEAS



Enhance our scientific opportunities

Grow our global outreach Increase our carreer options

Lead the field of planetary & solar system sciences exploration

PS ECS

members: 13%



Large sessions for active space missions and systems that are soon going to be visited (e.g., Jovian system)

New missions

NASA's decadal survey and Voyage 2050 Ice giant missions, Missions to Venus, etc!

Small sessions to deal with hot scientific topics that target very specific scientific questions

Enhance collaborations with other Divisions ST, GD, GMPV, ESSI, GM, CR

Splinter Meetings

> EGU24: 16 Active sessions with at least 28 abstracts per lead session! ECS abstracts 54%



Social Media Strategy



Conferences & Press



HOW? Press Strategy







EGU Angioletta Coradini Conferences

Submit a new proposal

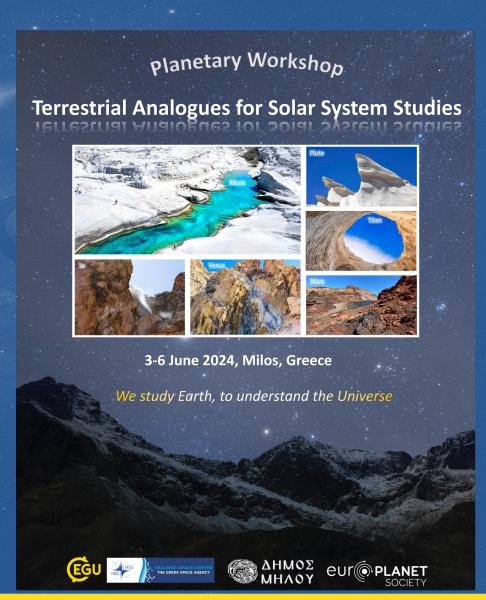
The 2024 call for EGU Conference Series is seeking submissions for the following conferences:

• Angioletta Coradini Conferences aim to promote novel and innovative research related to all aspects of space research, in particular chemical and physical processes and their interactions with the Sun, other host stars, the heliosphere and astrospheres with the planetary magnetospheres, atmospheres and climate. The conferences are named in honour of Angioletta Coradini (1946–2011) an Italian astrophysicist and planetary scientist.

Next submission period will be from 6 May – 17 June 2024. Evaluation results are expected to be published within three months after the submission deadline.

2024: We are organizing an Angioletta Coradini Conference!

HOW?





AIMTO

Gender Balance

EGU launches a new award: Champion(s) for Equality, Diversity and Inclusion Award!

Underrepresented countries

Early Career Scientists



EGU24

PS Active members: 7%

Female members: 8%

Non-binary: 100%

PS ECS members: 13%



Give us feedback

EGU:

egu24.eu/feedback (open until 31 May)

Anezina Solomonidou: anezina.solomonidou@hsc.gov.gr

Georgia Moutsiana (for ECS): georgiamoutsiana@gmail.com

Let's break new ground together and give PS the voice it deserves!



Any Other Business

Comments from the members



Division Meeting Planetary and Solar System Sciences (PS)

ADJOURN

https://www.egu.eu/ps/home/