



Planetary Sciences

March 2019 Newsletter

Greetings from Your Planetary Sciences Section Leadership!

Fall Meeting (back in San Francisco!) is looming, and we urge members to start proposing [sessions](#). Members can also propose a [town hall](#) or a [workshop](#). The submission period will close **17 April!** This is the AGU Centennial, and we particularly welcome ideas that will help celebrate this anniversary. AGU was established in 1919, and the first meeting was held in 1920 with 25 members presenting; you can find more information in [this fun timeline](#).

We thank those who donated to the Austin Endowment for Student Travel; [please consider donating](#) if you have not done so and help AGU achieve a \$1 million match. This matching fund was established by AGU member Jamie Austin, who remembers the amazing, positive impact that traveling to an AGU Fall Meeting had on him when he was a student himself. This is a great opportunity to help young people in the geosciences from all over the world.

Feel free to contact us with your Centennial ideas.

Rosaly Lopes, President

Michael Mischna, President-elect

David Williams, Secretary

Sam Birch, Early Career Representative

Ashley Schoenfeld, Student Representative

Sarah Stewart, Past President

Photos



AGU Planetary Sciences section president-elect Rosaly Lopes (left) presenting the Shoemaker Award to her Jet Propulsion Laboratory colleague Carol Raymond, principal investigator of NASA's Dawn mission, at Fall Meeting 2018.



AGU president Sarah Stewart presenting the Ronald Greeley Early Career Award to Brandon Johnson of Brown University at Fall Meeting 2018.



AGU president Sarah Stewart presenting the Fred Whipple Award to Philip Christensen of Arizona State University at Fall Meeting 2018.

Upcoming Deadlines & Events

For the latest Planetary Sciences updates and events, visit the section calendar.

Since the partial shutdown of the U.S. government ended, NASA has been rescheduling the due dates for upcoming NOI/proposals for NASA's ROSES-2018. Be sure to check websites for upcoming meetings for the latest information.

- 25–27 February 2019: [Workshop on In Situ Exploration of the Ice Giants](#), Aix-en-Provence, France
- 6–8 March 2019: [Centaur Exploration Workshop](#), Orlando, FL
- 18–22 March 2019: [50th Lunar and Planetary Science Conference](#), The Woodlands, TX
- 7–12 April 2019: [EGU General Assembly](#), Vienna, Austria
- 21–23 May 2019: [Ocean Worlds 4](#), Houston, TX

Planetary Sciences Announcements/Updates

Titan after Cassini–Huygens

[Titan after Cassini–Huygens](#) is a 3-day workshop to be held at the European Space Agency's (ESA) European Space Astronomy Centre near Madrid, Spain, on 23 - 25 September, open to all participants. This workshop will occur 2 years after the end of Cassini's wonderful mission, and its central theme will be a holistic view of Titan as a system. During the workshop, we will discuss the exciting results from the Huygens probe and from the Cassini orbiter during its 13-year journey in the Saturnian system. The mission returned a wealth of scientific data that have revolutionized our understanding of Saturn's largest moon, Titan. Major topics of the workshop will include the top scientific findings on the surface, interior, and atmosphere and their processes and interactions. The aim is to cover a combination of past and new science focusing on the fields and studies of magnetospheric and atmospheric science, geology, geophysics, astrobiology, Earth-based observations, future missions, and more. We believe that the timing is perfect for another European workshop to get an updated global vision of Titan, and we encourage you all to participate. The abstract submission deadline is **31 May**; the social event registration is still TBD. We look forward to seeing you in Madrid!

The organizing committee:

- Anezina Solomonidou (local)
- Nicolas Altobelli (local)
- Thomas Cornet (local)
- Japheth Yates (local)
- Rosaly Lopes (Jet Propulsion Laboratory)
- Athena Coustenis (Observatoire de Paris)
- Conor Nixon (NASA Goddard Space Flight Center)
- Alice Le Gall (Laboratoire Atmosphères, Milieux, Observations Spatiales)
- Steve Vance (Jet Propulsion Laboratory)

Call for Abstracts: Pluto System After New Horizons Conference

The Pluto System After New Horizons (PSANH) conference will provide an opportunity to summarize our understanding of the Pluto system and the Kuiper belt following the New Horizons encounters with Pluto and 2014 MU69 (Ultima Thule). Contributions spanning all relevant research on the Kuiper

belt, including both observations and theory, are being solicited. The conference will take place 14–18 July at the Johns Hopkins University Applied Physics Laboratory in Laurel, Md. Abstracts can now be submitted at the [PSANH website](#). **Abstract deadline** is 2 May by 5:00 p.m. central daylight savings time (GMT–5). Registration details will be announced 15 March on the [PSANH website](#).

The AbSciCon Session Call for Abstracts

The session [Astrobiogeochemistry: Modelling Biology and Its Co-evolution with the Environment on Earth and Implications for Exoplanets](#) (Session 67196) welcomes a diverse array of presentations that seek to further our understanding of the coevolution of life with its environment on a planetary scale, including novel interdisciplinary strategies relevant to remote life detection. AbSciCon will take place 24–28 June in Bellevue, Wash. Abstracts are being accepted until 11:59 p.m. ET on 6 March; submission guidelines can be found [here](#).

As the field of astrobiology has matured, it has become clear that interdisciplinary approaches are essential for identifying habitable and inhabited environments and increasing our chances of locating life elsewhere in the universe. Investigating the coevolution of life and its environment is important to understanding the role of biology in maintaining stable long-term conditions on a planetary surface, as well as the role specific environments play in promoting life.

Our search for life on exoplanets will depend on our ability to spectrally characterize and understand the abiotic and biotic contributions to planetary atmospheric chemical compositions and disequilibria. Essential for this undertaking is an understanding of the type and extent of biology (including metabolisms) that can support, or be supported by, differing atmospheric states on exoplanets. Conveners are Edward Schwieterman (University of California, Riverside), Aditya Chopra (Australian National University), Stephanie Olson (University of Chicago), Christopher Reinhard (Georgia Tech), Dennis Höning (Vrije Universiteit Amsterdam), and Matthieu Laneuville (Tokyo Institute of Technology).

Seeking Postdoctoral Scholar—University of California, Davis

The Department of Earth and Planetary Sciences at University of California, Davis seeks a postdoctoral scholar to study impact processes on rocky planets. [Current research programs](#) seek to understand the role of small and large collisions on the formation and habitability of rocky planets and the emergence of life. Applicants may pursue numerical simulations and/or experimental work in the department's Shock Compression Laboratory. The lab's primary research themes focus on understanding the role of material properties in governing the outcome of collisions, including the physical and chemical processes that shape planet formation and early Earth's habitability. The scholar may also participate in ongoing collaborations in the UC Center for Matter at Extreme Conditions, NASA's CLEVER Planets research team, and the Simons Collaboration on the Origins of Life. Required minimum qualifications include a Ph.D. in physics, geology, chemistry, materials science, or a related field. Desired qualifications include prior experience with numerical simulations of planetary collisions and/or experimental high-pressure techniques. Interested candidates should

contact [Prof. Sarah Stewart](#) with inquiries and apply by emailing a CV, contact information for three references, and a brief statement of research interests.

Postdoctoral Positions in Mars Science

The Department of Planetology and Habitability at the Centro de Astrobiología (CAB) in Spain invites applications for three postdoctoral positions to support investigations on the nature of the early Mars environments. We are seeking enthusiastic and excellent candidates to join a planetary science team funded by the European Research Council (ERC), working with Dr. Alberto Fairén in the project “MarsFirstWater” (ERC Consolidator Grant) broadening the efforts of the Project “icyMARS” (ERC Starting Grant). The three positions, placed in Madrid, would be for 2 years, with possible extension to a third year contingent upon satisfactory performance. Benefits include working on a young enthusiastic team at one of the leading planetary science institutions in Europe, full social benefits according to the Spanish social care system, and a very competitive salary.

Applicants should have a recent Ph.D. in the field of planetary science or related discipline, and a background in Mars research. Expertise in geomorphology/sedimentology, geochemistry, and microbiology, respectively, for each of the positions, is required. Interested applicants should send a letter of interest, a curriculum with a list of publications, a brief (maximum two pages) statement of research interests, and a list of three references, no later than 15 March, to [Alberto Fairén](#). The starting date is negotiable but should be no later than 1 September.

The 10th Planetary Crater Consortium Meeting

The 10th Planetary Crater Consortium meeting will be held 7–9 August at the U.S. Geological Survey in Flagstaff, Ariz. The Planetary Crater Consortium is open to all planetary scientists interested in any aspect of impact cratering on solar system bodies (including Earth!), incorporating observational, theoretical, experimental, field, and/or numerical studies. The meeting is a combination of contributed talks, posters, and open discussion and is designed to encourage and provide adequate time for in-depth discussion of crater-related issues and topics to enhance research collaborations. Abstract deadline is Monday, 24 June. An optional field trip around the rim of Meteor crater will be arranged for Saturday, 10 August, if there is sufficient interest. Contact [Nadine G. Barlow](#) with any questions or concerns.

Workshop on Introduction to Planetary Image Analysis with ArcGIS

The Spacecraft Planetary Imaging Facility (Cornell University), in conjunction with the Ronald Greeley Center for Planetary Studies (Arizona State University) and the U.S. Geological Survey (Flagstaff), is offering a free workshop at the upcoming 50th Lunar and Planetary Science Conference in Houston, Texas, on Sunday, 17 March, sponsored by the Regional Planetary Image Facility network. This will be an introductory-level course accessible to participants with no prior ArcGIS experience. The workshop will run from 9:00 a.m. to 4:00 p.m. and will cover topics including ArcGIS basics, spatial

analysis, and map document production, mostly through hands-on exercises using data from Mars Odyssey and Mars Global Surveyor. Participants will be given a 1-year ArcGIS license as part of the workshop. [Registration is required](#) and is open now until 8 March. Please contact [Zoe Learner Ponterio](#), SPIF data manager, for more information.

Joint JGR Special Issue Submissions

The joint JGR special issue “Studies of the 2018/Mars Year 34 Planet-Encircling Dust Storm” is accepting submissions until 1 June. Papers pertaining to observations and atmospheric modeling of this particular storm, its influence on the atmosphere and surface of Mars, and the physics of Martian dust storms are encouraged. Submissions are sought from mission and instrument teams and the broader scientific community. The editor is Scott Guzewich, and papers can be submitted through the [GRL](#), [JGR: Planets](#), or [JGR: Space Physics](#) submission websites.

The Planetary CubeStats Symposium

The annual [Planetary CubeSats/Smallsats Symposium](#) will be held this year on 27–28 June at NASA Goddard Space Flight Center in Greenbelt, Md., with the participation of CubeSat scientists and developers. Discussions include current missions, mission concepts, and opportunities for future mission selections. The sessions also include panel discussions about strategic and technical aspects of planetary CubeSats, and an afternoon poster session provides mission proposers the opportunity to meet with vendors and suppliers. Registration is now open.