



Planetary Sciences

September 2019 Newsletter

Greetings from Your Planetary Sciences Section Leadership!

Our Planetary Sciences section had 920 abstracts submitted for Fall Meeting 2019! This past week, your Program Committee (Conor Nixon, Padma Yanamandra-Fisher, and Dave Williams) finalized the organization of sessions, which include **38** oral sessions with **345 talks** scheduled, **37** posters sessions with **575 posters** scheduled, along with **3** eLightning sessions with **49 presentations** scheduled, and **8** planetary-related **town halls**. There will also be several planetary-related AGU Centennial lectures and special events, so be sure to check those out. They will take place on Wednesday, 11 December, in the Centennial Theater and other venues. We will send you updates on the Centennial program as well as on our special lectures, the planetary reception, and the early-career luncheon as they are finalized.

Thank you to all of the members who submitted abstracts and to the session conveners who organized the sessions. We hope you are happy with the sessions at this year's meeting.

Looking forward to seeing many of you at Fall Meeting!

Rosaly Lopes, President

Michael Mischna, President-elect

David Williams, Secretary

Sam Birch, Early Career Representative

Ashley Schoenfeld, Student Representative

Sarah Stewart, Past President

Upcoming Deadlines & Events

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

Upcoming Deadlines

- ROSES-2019: Mars Data Analysis, Step-1 proposals: 20 September 2019 (delayed submittal)
- ROSES-2019: Planetary Instrument Concepts for the Advancement of Solar System Observations (PICASSO), Step-1 proposals: 20 September 2019

Upcoming Conferences

- **10–12 September:** National Academies of Sciences, Engineering, and Medicine's Committee on Astrobiology and Planetary Science (CAPS), Irvine, Calif.
- **15–20 September:** Joint European Planetary Science Congress–Division for Planetary Sciences (EPSC–DPS) Meeting, Geneva, Switzerland
- **22–25 September:** Geological Society of America (GSA) Annual Meeting, Phoenix, Ariz.
- **23–25 September:** Titan After Cassini–Huygens Workshop, Madrid, Spain
- **30 September to 3 October:** Large Meteorite Impacts and Planetary Evolution VI, Brasilia, Brazil

Planetary Sciences Announcements/Updates

1. NASA Postdoctoral Fellowship: Application Deadline, 1 November 2019

The NASA Postdoctoral Program offers U.S. and international scientists the opportunity to advance their research while contributing to NASA's scientific goals. The NPP supports fundamental science, explores the undiscovered, promotes intellectual growth, and encourages scientific connections.

Selected by a competitive peer review process, NPP Fellows complete 1- to 3-year fellowship appointments that advance NASA's missions in Earth science, heliophysics, planetary science, astrophysics, space bioscience, aeronautics and engineering, human exploration and space operations, and astrobiology.

Current NPP research opportunities in planetary science can be viewed here: [NPP Planetary Science Research Opportunities](#).

Applicants must have a Ph.D. or equivalent degree in hand before beginning the fellowship, but they may apply while completing the degree requirements. U.S. citizens, lawful permanent residents, and foreign nationals eligible for J-1 status as a research scholar may apply.

Stipends start at \$60,000 per year, with supplements for high-cost-of-living areas and for certain academic specialties. Financial assistance is available for relocation and health insurance, and \$10,000 per year is provided for professional travel.

Applications are accepted three times each year: 1 March, 1 July, and 1 November.

For further information and to apply, visit <https://npp.usra.edu/>.

Questions: npphelp@usra.edu

2. Rocky Exoplanets in the Era of JWST: Theory and Observation (2nd Annual NASA Goddard SEEC Symposium)

Dates: 4–8 November 2019

Location: NASA Goddard Space Flight Center in Greenbelt, Md.

Registration is now open for the second annual NASA Goddard Sellers Exoplanet Environments Collaboration (SEEC) Symposium, titled **Rocky Exoplanets in the Era of JWST: Theory and Observation**, which will be held **4–8 November 2019** at **NASA Goddard Space Flight Center** in Greenbelt, Md. The symposium will be hosted by SEEC and cosupported by the University of Maryland Astronomy Department.

The goal of this meeting is to bring together theorists and observers interested in rocky exoplanets from across the exoplanet community and related fields, to help us all prepare for the first light of the James Webb Space Telescope era by framing the key questions about these worlds and the exciting new observations that will help us characterize them.

The workshop will include invited overview talks combined with short research presentations, as well as ample time for group discussion and collaborative work sessions. The website for registration and abstracts for combined poster+flash talks is open! Attendance will be limited by space, so please check out the meeting's web page and register now.

Website with preregistration and a full list of session topics and current invited speakers: <https://seec.gsfc.nasa.gov/Symposium.html>

3. ESA Research Fellowships in Space Science

The European Space Agency (ESA) awards several postdoctoral fellowships each year. The aim of these fellowships is to provide scientists in their early career, holding a Ph.D. or equivalent degree, with the means of performing research in fields related to the ESA Science Programme.

Areas of research include planetary science, astronomy and astrophysics, solar and solar-terrestrial science, plasma physics, and fundamental physics. The fellowships have a duration of 2 years, with the possible extension to 3 years, and are tenable at the European Space Research and Technology Centre (ESTEC) in Noordwijk, Netherlands, or at the European Space Astronomy Centre (ESAC) in Villafranca del Castillo, near Madrid, Spain.

Applications are now solicited for fellowships in space science to begin in the fall of 2020. Preference will be given to applications submitted by candidates in an early stage of their career. Candidates not yet holding a Ph.D. are encouraged to apply, but they must provide evidence of having received their degree before starting the fellowship.

ESA fellows are enrolled in ESA's Social Security Scheme, which covers medical expenses. A monthly deduction covers these short-term and long-term risks.

The deadline for applications is 1 October 2019.

More information on ESA Research Fellowships in Space Science, on conditions and eligibility, as well as the application form can be retrieved from

<https://www.cosmos.esa.int/web/science-faculty/research-fellowship>

Questions on the scientific aspects of ESA Research Fellowships in Space Science not answered above can be sent by email to the fellowship coordinators, Dr. Oliver Jennrich or Dr. Jan-Uwe Ness, at the address fellowship@cosmos.esa.int.

4. Job Announcement: Photogrammetrist (GS-11/12 Physical Scientist), U.S. Geological Survey, Flagstaff, Ariz.

The **U.S. Geological Survey Astrogeology Science Center** works in coordination with NASA and other agencies to support missions to planetary objects across the solar system. If you are looking for a rewarding position in the federal workforce and have expertise in photogrammetry and software development, we need your help! Job duties include developing software, algorithms, and/or guidelines for mapping planetary data; developing planetary sensor models that define the transformation between image space and object space; producing improved geospatial knowledge of extraterrestrial bodies and planetary data sets (e.g., spacecraft ephemerides, digital elevation models, orthorectified images and mosaics, metadata, and control networks); and providing guidance to technical staff working on photogrammetric and geodetic production tasks.

Applicants must have a bachelor's or higher degree in physical science, engineering, or mathematics; expertise in the concepts, theories, and principles of photogrammetry, cartography, geodesy, and/or computer vision; and experience developing and modifying software to apply these principles to highly varied data sets.

Applicants must be U.S. citizens, and a background check is required. This position is located in Flagstaff, Ariz.

Apply starting 2 September 2019 through [USAjobs.gov](https://www.usajobs.gov), announcement DEN-2019-0254 (<https://www.usajobs.gov/GetJob/ViewDetails/543559200>).

Contact Brent Archinal with questions: barchinal@usgs.gov; 1-928-556-7083.

5. Postdoctoral Research Assistant at the Florida Space Institute/University of Central Florida in Small-Body Planetary Sciences

Job Description

The Florida Space Institute (FSI) at the University of Central Florida (UCF) invites applications for a postdoctoral associate position to carry out research on the physical processes on the surface of small bodies such as asteroids. The successful candidate will be expected to investigate material and mechanical properties of asteroid simulants under relevant conditions. Research will be performed with various instrumentation at the Florida Space Institute, and supplemental hardware may be developed to carry out experiments. In addition, the successful candidate will perform numerical simulations of the behavior of granular material by adapting existing discrete element model code, under guidance from our collaborator at the University of Colorado Boulder. Supervision of undergraduate research assistants and publishing research results in peer-reviewed journals are expected.

The position is expected to have a start date before November 2019 and is renewable annually for up to 3 years.

FSI is associated with the Center for Lunar and Asteroid Surface Science (CLASS) and the Arecibo Observatory, providing exciting opportunities for collaboration and networking. The University of Central Florida is a thriving preeminent research university located in metropolitan Orlando. With more than 66,000 students, UCF is one of the largest universities in the United States. The university benefits from a diverse faculty and staff who create a welcoming environment and opportunities for all students to grow, learn, and succeed. We encourage you to learn more about UCF at <https://www.ucf.edu/>.

Minimum Qualifications

A Ph.D. from an accredited institution in physics, astronomy, astrophysics, planetary sciences, or a related field is required.

Preferences

Experience in the following is of interest:

- Hands-on experience in hardware design, manufacturing, and operation
- Laboratory work with cryogenic samples
- Mentoring of undergraduate students
- One or more of the following coding languages: IDL, Python, C, C++, Fortran

EEO Employer

As an equal opportunity/affirmative action employer, UCF encourages all qualified applicants to apply, including women, veterans, individuals with disabilities, and members of traditionally underrepresented populations. UCF's equal opportunity statement can be viewed at <http://www.oie.ucf.edu/documents/PresidentsStatement.pdf>. As a Florida public university, UCF makes all application materials and selection procedures available to the public upon request.

UCF requires all applications and supporting documents to be submitted electronically through the Human Resources website, at <https://jobs.ucf.edu/cw/en-us/job/498004>. In addition to the online application, interested candidates should upload a curriculum vitae and a brief description of prior research experience.

Additional Application Materials Required

In addition to the online application, candidates must also submit

1. Full curriculum vitae
2. Cover letter describing their related experience
3. Statement of research interests
4. Names, addresses, and email addresses of three people willing to write letters of recommendation

Questions may be directed to Dr. Julie Brisset, Associate Researcher, Florida Space Institute, at julie.brisset@ucf.edu.

6. Subject Matter Expert Reviewer of Proposals Submitted to NASA

Cornell Technical Services LLC (CTS) is a support contractor to NASA.

CTS seeks Subject Matter Experts with significant experience in the design, development, and operations of missions, spacecraft, and instruments relevant to NASA's goals. We help NASA evaluate proposals and review programs for investigations intended to help answer the big questions of Earth science, heliophysics, planetary science, and astrophysics.

As a CTS part-time employee or consultant, you will participate as a Subject Matter Expert on review teams conducting in-depth technical, management, and cost assessments of proposals and Phase A concept studies. Our work is performed remotely, with travel occurring periodically during the assignment to bring the geographically distributed teams together to finalize results. An ideal candidate is willing and able to work part-time on an as-needed basis to support the tasks and has significant direct, hands-on build and spaceflight technical or management responsibility in one or more of the following areas:

- Flight systems
- Mission design and operations, including trajectory analysis
- Design, development, and operation of spacecraft and spacecraft subsystems
- Space-based instruments including passive remote sensors in all wavelengths, active sensors and systems, and in situ instruments for particles and fields or direct material sampling

- Senior systems engineering for either spacecraft or instruments
- Space communications and ground systems development and operations
- Mission leadership as a program or project manager

CTS provides support to the NASA Science Mission Directorate (SMD) on the Evaluations, Assessments, Studies Service and Support (EASSS-2) contract by assembling evaluation teams in response to Announcements of Opportunities and other acquisition requests by supporting the Technical, Management, and Cost (TMC) evaluations for NASA acquisitions. The following URL will provide more information: <https://soma.larc.nasa.gov>.

We are currently developing the staffing plans for several upcoming SMD TMC evaluations.

Panel members are compensated for their time and expertise.

For more information, contact us via email at smes@cts-llc.com, visit us online at www.cts-llc.com, or phone 1-757-251-2691.

7. Journal Special Issue: Planetary Exploration of Habitable Environments

The journal *Life* (ISSN 2075-1729) is currently running a special issue entitled "Planetary Exploration of Habitable Environments." Prof. Dr. Dirk Schulze-Makuch of the Technical University of Berlin (Berlin, Germany) and Dr. Alberto G. Fairén of the Centro de Astrobiología (Madrid, Spain) and Cornell University (Ithaca, N.Y., USA) are serving as guest editors for this issue.

Submission deadline: 15 October 2019

For further reading, please follow the link to the special issue website at https://www.mdpi.com/si/life/Planetary_Exploration.

For further details on the submission process, please see the instructions for authors at the journal website: <http://www.mdpi.com/journal/life/instructions>.

8. Job Announcement: Editor of the Planetary Science Journal (PSJ)

URL with detailed job info: <https://jobregister.aas.org/ad/cfd23f2c>

Description

The American Astronomical Society (AAS) and the Division for Planetary Sciences (DPS) are soliciting applications and nominations of candidates for the position of editor of the Planetary Science Journal (PSJ). This is a new journal to serve the planetary science community. See the press

release: <https://aas.org/posts/news/2019/08/aas-dps-launch-gold-open-access-planetary-science-journal>.

The search committee is looking for candidates who have a record of achievement in planetary science, experience as an author and referee in this field, and a clear vision for the future of the PSJ. Previous editorial experience would be useful but is not required.

Candidates for this position should submit a cover letter, CV, bibliography, and names of two references to personnel@aas.org.

Nominations for the position may also be sent to the same address. Selected candidates will be asked to provide evidence of institutional support for their assuming the above editorial duties.

The cover letter should address the candidate's qualifications, reason for interest in the position, and ideas for the operation, management, and future of the PSJ.

Nominations submitted by 30 September 2019 will be given full consideration.

More information can be found at <https://jobregister.aas.org/ad/cfd23f2c>.

9. Final Announcement for Icarus Special Issue on Kuiper Belt Science

Discoveries about the Kuiper belt and trans-Neptunian objects have been accelerating over the past 2 decades. In the past 5 years, NASA's New Horizons spacecraft initiated the close-up exploration of Kuiper belt objects with the flybys of the Pluto system the cold classical KBO 2014 MU69 (nicknamed Ultima Thule). In addition, many advances have been made in telescopic observations and theoretical modeling of the Kuiper belt and dwarf planets. This special issue calls for results related to the exploration of the Pluto system, the Kuiper belt, and Kuiper belt objects, particularly by New Horizons, ground-based techniques, and NASA's New Frontiers Data Analysis Program (NFDAP) projects. Papers are solicited from authors across the planetary science community, and interdisciplinary papers are welcome.

Revised paper submission deadline: 1 October 2019

Topics of interest include, but are not limited to,

- Geologic mapping and geomorphologic analyses
- Geophysical and geochemical modeling
- Particle or plasma data
- Dynamical or collisional evolution modeling
- Analysis of the composition and photometric properties
- Atmospheric measurements or modeling
- Ground- or space-based telescopic data

- Laboratory analysis of analog materials

Sincerely,

Alan Stern, Rick Binzel, Will Grundy, Kelsi Singer, and Oliver White
Guest Editors