

## Newsletter 18-35

Issue 18-35, August 28, 2018

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### MESSAGE FROM THE CHAIR

The 50th DPS meeting is approaching! Don't miss the regular registration deadline on August 31.

Our banquet will be held at the Knoxville Museum of Art (KMA) and we can visit the galleries from 7-9 pm that evening (Wednesday October 24). The KMA celebrates the art and artists of East Tennessee, presents new art and new ideas, and educates and serves a diverse community. The banquet menu is posted on the DPS webpage and includes selections to satisfy diverse dietary needs (<https://aas.org/meetings/dps50/events#events> [1]). The annual Open-Mic Night (open to all for no cost) will also be held at the KMA following the banquet. Banquet attendees will therefore be in the right place to enjoy the open-mic performances.

Please also note a new event on the schedule at 8-9pm on Thursday -- a dramatic reading of the play Little Lessons for Lina. The play, written by University of Tennessee science journalism professor Mark Littmann, is a scientifically and historically accurate account of the life and discoveries of Caroline Herschel, the first woman to be a professional astronomer. There is no fee for attendance.

There are still some spots available for the post-meeting field trips to the Smoky Mountains and Blue Springs cave.

I am looking forward to the Early Career Presenters Review at DPS. We invite early career scientists, including undergraduate and graduate students, postdocs, others early in their careers, and first-time presenter to participate in this year's Early Career Presenters Review at DPS. Join this educational opportunity to receive feedback from seasoned presenters! There are four sessions for this year's DPS Early Career Presenters Review: Sunday October 21 at 3pm, Monday October 22nd at 7am, noon, and 4pm. Early career scientists are invited to practice their oral or poster presentation and receive feedback before presenting during the regular meeting. Participants also have the opportunity to network with their peers and future colleagues. Registration is free but required for participants:

[https://www.surveymonkey.com/r/DPS\\_18\\_EC](https://www.surveymonkey.com/r/DPS_18_EC) [2]

We are also looking for scientists to participate in this year's review. Your commitment will be 1 to 1.5 hours and is an important way to give valuable early career scientists. Please email Sanlyn Buxner (buxner at psi.edu) to participate or with any questions.

As we are approaching this landmark DPS meeting, I hope you enjoy the updated photo gallery of images from previous DPS meetings:

<https://photos.aas.org/DPS> [3]

Cathy Olkin

DPS Chair

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## ALMA ANNOUNCEMENT

ALMA announces a program to monitor the evolution of CO and H<sub>2</sub>O in the Martian atmosphere during the recent dust storm, for Cycle 5  
Aug 28, 2018

The ALMA Observatory announces four filler programs that have been approved on the Atacama Compact Array (ACA), also known as the Morita Array. The programs were designed to fill a gap in the ACA observing schedule in the remainder of Cycle 5 between LST of 22 and 1.5 h. The programs were selected based on input from scientists at the Joint ALMA Observatory (JAO) and the ALMA Regional Centers (ARCs). The proposed programs were reviewed by the ALMA Integrated Science Team (IST) with final approval by the ALMA Director.

The approved programs include:

2017.A.00043.T: Time evolution of CO & H<sub>2</sub>O in the Martian atmosphere during a large-scale dust storm

This project will monitor the evolution of CO and H<sub>2</sub>O in the Martian atmosphere during the recent dust storm.

as well as several non-planetary programs.

The data from the proposals will be quality assessed by the JAO and released

through the ALMA Archive with no proprietary period. Any remaining PI

science programs and activities to commission new capabilities on the array

will have priority, and therefore the above programs may not be completed in full.

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7th JOINT WORKSHOP ON HIGH PRESSURE PLANETARY AND PLASMA PHYSICS (HP4)

2018, October 10-12, DLR Berlin, Rutherfordstr. 2, Germany.

The HP4 workshop brings together scientist interested in the interiors of

planets, brown dwarfs or stars.

Some of the topics covered are:

- Evolution, structure and dynamics of gas and solid planet interiors
- Deep volatile cycles and exchange processes between geochemical reservoirs
- Physics and chemistry of impact processes
- Equations of state, petrology, and geochemistry of planetary materials
- Melting relations and phase transformations of materials at extreme states
- Dynamic and ultrafast processes in strongly excited solids or similar
- Compression experiments using high-power optical and free electron lasers
- Laboratory experiments using multi-anvil and diamond-anvil cells
- Ab-initio simulation studies for matter under extreme conditions

For more information, registration and abstract submission please visit

the meeting web site:

<https://indico.desy.de/indico/event/18893/> [4]

Important dates:

- Registration deadline: August, 31
- Abstract submission deadline: August , 31

In case of questions please contact the local organizing committee at DLR Berlin:

Doris Breuer ([doris.breuer@dlr.de](mailto:doris.breuer@dlr.de) [5])

Frank Sohl ([frank.sohl@dlr.de](mailto:frank.sohl@dlr.de) [6])

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COMMUNITY WHITE PAPER ON THE CASE FOR LANDED MERCURY SCIENCE

A community White Paper on the case for landed Mercury science is now available at:

<https://www.lpi.usra.edu/NASA-academies-resources/White-Paper-Landed-Mercury-Science.pdf> [7]

We welcome additional signatories; please reach out to Paul Byrne ([paul.byrne@ncsu.edu](mailto:paul.byrne@ncsu.edu) [8]) or any of the White Paper organizing committee members to have your name added to the document.

Thank you for your support for the continued exploration of Mercury!

Paul Byrne  
David Blewett  
Nancy Chabot  
Steven Hauck  
Erwan Mazarico  
Kathleen Vander Kaaden

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#### PLANETARY SCIENCE SLIDES AND ILLUSTRATIONS

Planetary Science Research Discoveries (PSRD) has sets of Powerpoint slides for your use. These are summaries of PSRD articles covering planetary science, including the processes by which planets, moons, and small bodies form and evolve. The slides have captions and notes, and are linked to PSRD articles that provide the full context, additional graphics, and primary sources. New content added monthly. Use our search box to find just what you need.

<http://www.psr.d.hawaii.edu/Archive/Archive-PSRDpresents.html> [9]

The Cosmochemistry Illustrated website offers additional Powerpoint slides with planetary examples to enrich geochemistry, petrology, and introductory geology lectures. References and background are given in the notes pages.

<http://www.higp.hawaii.edu/cosmoeye/> [10]

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#### JOBS, POSITIONS, OPPORTUNITIES

##### A) STAFF SCIENTIST - OCEAN WORLDS

JET PROPULSION LABORATORY,  
CALIFORNIA INSTITUTE OF TECHNOLOGY

The Jet Propulsion Laboratory, California Institute of Technology, invites applications for a staff Scientist position in areas relevant to understanding

Ocean Worlds. The position is to conduct Ocean Worlds-related scientific research within the fields of Geochemistry and Astrobiology. It is expected that the successful candidate will develop an independently funded research program and will pursue new mission and/or instrument opportunities focusing on Ocean World exploration.

The position requires a Ph.D. in planetary science, or related scientific discipline, along with demonstrated experience in conceiving, defining, and conducting independent scientific research, with a strong interest in applying those efforts to problems related to Ocean Worlds exploration. The successful candidate will have a demonstrated professional reputation as a productive researcher with a track record of publications in peer-reviewed journals.

Please visit <https://www.jpl.nasa.gov/opportunities/experienced/> [11]  
(Job ID 2018-9596). For a full description.

Applications received by September 30, 2018, will receive full consideration.

#### B) POST-DOCTORAL POSITIONS - EXPERIMENTAL STUDY OF COMETARY ACTIVITY

The Universities of Bern (Switzerland) and Braunschweig (Germany) invite applications for a Postdoctoral Scholar at each institution to conduct experimental studies of cometary activity within the framework of a 3-years joint research project ("D-A-CH" project) between Bern, Braunschweig and Graz (Austria). The detailed descriptions of both positions and instructions to apply can be found at:

[http://www.space.unibe.ch/research/research\\_groups/planetary\\_imaging\\_group\\_pig/open\\_positions/index\\_eng.html](http://www.space.unibe.ch/research/research_groups/planetary_imaging_group_pig/open_positions/index_eng.html) [12]

The review of complete applications will begin in September and the positions will remain open until suitable candidates are hired.

## C) RESEARCH PHYSICAL SCIENTIST POSITION AT NASA ARC

The Exobiology Branch at National Aeronautics and Space Administration (NASA) Ames Research Center (ARC) is currently seeking interested applicants for the position of a Research Physical Scientist. The Research Physical Scientist conducts research that emphasizes the conception and development of flight instruments that are suitable for detecting evidence of life, including extant life, and/or identifying and characterizing habitable environments beyond Earth.

This position will be filled at the GS-12 grade level only; the FPL (full promotion level) is at the GS-14 grade level. Selectee can be promoted without further competition.

The vacancy announcement, AR18D0056 - Research Physical Scientist, Research AST, Chemical and Biological Evolution, can be found at USA JOBS at this link:

<http://www.usajobs.gov/GetJob/ViewDetails/508618500> [13]

Applications are being accepted until 9/21/2018.

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Send submissions to:

Anne Verbiscer, DPS Secretary ([dpssec@aas.org](mailto:dpssec@aas.org)) [14]

You are receiving this email because you are a DPS member.

To unsubscribe or update your information, please send your request to [privacy@aas.org](mailto:privacy@aas.org) [15]. The more general AAS privacy policy is available online at <https://aas.org/about/policies/privacy-policy> [16].

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- [3] <https://photos.aas.org/DPS>
- [4] <https://indico.desy.de/indico/event/18893/>
- [5] <mailto:doris.breuer@dlr.de>
- [6] <mailto:frank.sohl@dlr.de>
- [7] <https://www.lpi.usra.edu/NASA-academies-resources/White-Paper-Landed>
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