Newsletter 19-26

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UPDATE: NEW COMETARY INSIGHTS FROM THE CLOSE APPROACH OF 46P/WIRTANEN - A SYMPOSIUM IN CELEBRATION OF MIKE A’HEARN

This is a reminder that registration for the meeting (August 6-8, 2019 on the University of Maryland campus) is currently open. Early registration ends on July 12, at which time the registration fee increases from $125 to $135.

We also note that although comet Wirtanen, due to its recent close approach, was highlighted for the theme of the symposium, we invite other talks as well, including those about other comets, about big-picture views of comets, or simply talks presenting memories of Mike.

Abstracts requesting an oral talk are due on July 12. Submissions after that date are likely to be assigned poster status.

We have a small amount of funding available to help support student travel. If you are interested in applying for this support, please send a 1-page application describing your student status, Institution, who you are working with, and what you intend to present. Applications are due by the July 12 registration deadline and can be emailed to wirtanencampaign@gmail.com [1].

For more information about the meeting and a link to the registration
EPSC-DPS 2019 DPS DEPENDENT CARE GRANTS

The DPS Susan Niebur Professional Development Fund provides financial assistance to qualifying members of the DPS in order to facilitate their meeting attendance by offsetting dependent care costs (such as child care, elder care, spousal care, etc) at the meeting location, or at home, during the DPS conference week. For 2019, the DPS Professional Development Subcommittee will accept applications for dependent care subsidies to assist an eligible DPS member to attend the Joint EPSC-DPS Meeting in Geneva, Switzerland (September 2019). The deadline for applications is 12 August 2019. Please access the grant application form at https://dps.aas.org/development#grants.

Mark Gurwell, DPS Professional Development Subcommittee member

ROCKY EXOPLANETS IN THE ERA OF JWST: THEORY AND OBSERVATION, NOV 4-8, 2019

Dear Colleagues,

We’d like to remind you about the 2nd Annual NASA Goddard SEEC Symposium, titled "Rocky Exoplanets in the Era of JWST: Theory and Observation", which will be held November 4 - 8, 2019 here at NASA Goddard. The Symposium will be hosted by the GSFC Sellers Exoplanet Environments Collaboration (SEEC) and co-supported 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 and planetary community and
related fields, in order 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 Symposium website now has a full list of sessions topics and the current invited speakers list: [https://seec.gsfc.nasa.gov/Symposium.html](https://seec.gsfc.nasa.gov/Symposium.html) [4].

The website for Registration and Abstracts for combined poster+flash talks will open at the beginning of August. Attendance will be limited by space (max of 150 attendees), so please check out the meeting's webpage and pre-register now. We will alert pre-registrants first when the full registration and abstract submission pages are available.

Best,
Avi Mandell, Eliza Kempton, and the Symposium SOC and LOC

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**INCLUSIVE ASTRONOMY 2 CONFERENCE: ABSTRACT SUBMISSION/PRE-REGISTRATION**

The Inclusive Astronomy 2 Conference will be held from October 14-15, 2019, at the Space Telescope Science Institute in Baltimore, MD. Like the first Inclusive Astronomy conference, IA2 will serve as a venue to advocate and provide resources for the inclusion in the astronomy community of people of color; LGBTQIA+ people; people with disabilities; women; and everyone who holds more than one of these underrepresented identities. Come take part in a community discussion to reflect on the state of the profession and envision how to improve it into the 2020s. Pre-registration and abstract submission for IA2 are now open, and due by Friday, July 19, 2019. To pre-register and submit an abstract, please fill out the form here:

[https://tiny.cc/IA2PreReg](https://tiny.cc/IA2PreReg) [5]

Please note that pre-registration is mandatory for attendance at the
conference. For more information, please visit the website pages about registration and abstract submission. Direct any questions to inclusion2@stsci.edu [6] - and spread the word!

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CALL FOR ABSTRACTS: 2019 AGU FALL MEETING

1. SESSION ED026 – ENGAGEMENT OPPORTUNITIES FOR EVERYONE THROUGH SCIENCE FESTIVALS

Anyone interested in sharing their experiences participating in science festivals [7] as a means of engaging audiences is encouraged to submit an abstract to the 2019 AGU Fall Meeting session Engagement Opportunities for Everyone through Science Festivals [8].

Increasing numbers of think pieces and news articles position scientists as experts yet still leave people questioning the science. Now, more than ever, it is crucial for scientists to be present in conversations around scientific subjects. Enter: science festivals. This session will illustrate the power of engaging public audiences with science festivals through descriptions of ongoing events, discussions of evaluation methods and results, and connecting scientists with resources and experts to help them join current festivals, or start their own.

For scientists already engaging with public audiences, this session will provide next-steps for communicating their science. This session will focus on what science festivals are, why engagement is important for scientists, and how scientists can connect with this living resource. Abstracts from education/communication professionals and scientists are welcome. Topics of interest may include science communication at live events, scientists’ engagement and outreach activities, and evaluation.

https://agu.confex.com/agu/fm19/prelim.cgi/Session/82194 [8]
2019 Fall AGU abstract submission deadline is July 31, 2019 at 11:59 p.m. EDT. Don’t forget:

submitting an education abstract won’t count against your first author science abstract submissions!

At AGU, one first author education abstract is allowable in addition to a science abstract.

Questions? Contact Andy Shaner [9].

### 1. SESSION P005: CARBON ACROSS THE SOLAR SYSTEM

We invite abstracts for the following session at the 2019 AGU Fall Meeting in San Francisco, CA, December 9-13, 2019.

Recent results ranging from the Kuiper Belt, the Pluto system, the Saturn system, other locations beyond ~5 AU, all the way to Mercury in the inner Solar System, and nearly all points in between, raise questions about the state of carbon in the Solar System: how do carbonaceous compounds become weathered in response to thermal processes and irradiation? How do we recognize carbon compounds and their various weathering products? The syntheses of these results improve our scientific understanding of the role of carbon in the Solar System, how it evolves and how to recognize it. The carbonaceous near-Earth asteroids 162173 Ryugu and 101955 Bennu are now being visited and sampled; the analyses of these samples will provide context for the presence of carbon. In this session, abstracts covering observational, laboratory and modeling work related to carbon and carbonaceous species on Solar System bodies are welcome.

The deadline for abstract submissions is Wednesday, 31 July, 23:59 EDT

Conveners: Faith Vilas (PSI, fyilas@psi.edu [10]), Amanda R. Hendrix (PSI), Yvonne J. Pendleton (NASA ARC)

### 1. SESSION P013: FINDING, EXPLORING AND CHARACTERIZING TERRESTRIAL EXOPLANETS: THE NEXT FRONTIER

We are pleased to invite you to submit an abstract for the following session at the 2019 AGU Fall Meeting in San Francisco, CA, December 9-13, 2019.

This session is a discussion of the potential of new and future facilities and modeling efforts designed to detect, image and characterize Earth-size and super-Earth terrestrial exoplanets, studying their formation, evolution and also the existence of possible biospheres. Topics to be covered in this session include instrument requirements and technologies to detect these exoplanets; strategies for target selection and prioritization; signs of exoplanet habitability and global biosignatures that can be sought with upcoming
instrumentation; impacts of planetary system properties; and future ground-based and space telescope architectures.

For more information, visit:


The submission deadline is Wednesday, July 31, 2019.

Conveners:
Franck Marchis (SETI Institute)
Ramses Ramirez (Tokyo Institute of Technology)
Douglas A. Caldwell (SETI Institute)

1. SESSION P040: TITAN: THE EXOTIC AND ENIGMATIC MOON

Saturn’s giant moon Titan is one of the most mysterious, and yet strangely familiar, realms in the solar system. Possessing a dense atmosphere enriched in organic compounds, its active photochemistry works to produce a panoply of molecules of increasing size and complexity, running the gamut from ethane to haze particles. This session solicits presentations on all aspects of Titan research, including on-going Cassini dataset analysis, Earth-based observations, modeling, laboratory investigations, and comparison with other bodies.

Conveners: Conor Nixon (NASA GSFC), Alex Hayes (Cornell University), Kathleen Mandt (Johns Hopkins APL)

Submissions welcome until: 31 July 2019 23:59 EDT/03:59 +1 GMT.

At:

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GROUND AND SPACE OBSERVATORIES : A JOINT VENTURE TO PLANETARY SCIENCE

Dear all,
I am pleased to announce that pre-registration is now open for an ALMA workshop on: "Ground and space observatories: a joint venture to planetary sciences"

March 2-6, 2020
Santiago, Chile

This is a follow-up to the successful workshop organized in March 2015. The goal will be to investigate further the potential synergies between ground and space-based observatories in the exploration of the Solar System, and to continue fostering collaborations among planetary scientists through the sharing of scientific and technical knowledge.

Topics for scientific discussion will be open to all bodies of the Solar system (planets, moons, asteroids, TNOs and comets), and will cover the body itself as well as its atmosphere, and any rings. We also look forward to discussing results on exoplanets, as comparative planetology investigations relating to the properties of our Solar System. We intend to organize the sessions in a way that emphasizes the parallels between the results from ground and space-based observatories. There will also be the opportunity to display posters with dedicated sessions for everyone to read and discuss them.

On the last day, we will run a proposal preparation workshop for ALMA and JWST. Both observatories will have a proposal deadline soon after March 2020, such that the timing will be perfect to work on coordinated investigations. Invited speakers will be announced on our website in the next few weeks as soon as they have been confirmed.

The meeting will be held at the ALMA office in Santiago, which is located on the ESO campus in Vitacura. Participation will be limited to 100. The registration fee will be 250 EUR (150 EUR for students). We hope to be able to offer financial support for a number of students.

The deadline for abstract submission will be mid-November 2019.
Finally, there will be the opportunity for a limited number of participants to fly to the North of Chile and enjoy a guided tour of the ALMA observing site on March 7. More details will be given on the website in the next weeks.

We hope to see you next year in Santiago!

Best regards,
Eric Villard

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THIRD CALL: “MODELING AND SIMULATION OF PLANETARY ATMOSPHERES” SPECIAL ISSUE

This is the third and final call for submissions to the special issue “Modeling and Simulation of Planetary Atmospheres” [13] in the open-access journal Atmosphere. There are on the order of two dozen contributions in every stage of preparation, and we are excited about the breadth of the response. If necessary, reasonable time extensions may be negotiated before the 16 August 2019 due date by contacting the Managing Editor, Colin Chen <colin.chen@mdpi.com [14]> or the Guest Editor, Tim Dowling <dowling@louisville.edu [15]>.

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JOBS, POSITIONS, OPPORTUNITIES

A) POSTDOCTORAL POSITION IN PLANETARY SCIENCES

University of Maryland

College Park, Maryland

The Small Bodies Group in the Department of Astronomy at the University of Maryland, College Park invites applications for a Postdoctoral Research
Associate to work with Dr. Tony Farnham and Dr. Jessica Sunshine to develop and apply models to simulate sublimation processes on solar system bodies, to explore how they impact the surface features and morphology, and to intercompare results among different objects. Of particular interest in this study are bodies with microgravity environments, including the Rosetta target comet 67P/Churyumov-Gerasimenko.

The UMD Small Bodies Group specializes in remote sensing observations, both ground-based and space-based, and theoretical modeling, primarily of comets, asteroids, and the Moon. Our group has been involved with multiple spacecraft missions and instrument teams, including Deep Impact, EPOXI, Dawn, Lucy, Rosetta, Stardust NExT and Chandrayaan. We are also at the forefront in using current and upcoming facilities to study small bodies, including JWST, TESS, LSST, DCT and numerous other ground-based observatories. UMD also operates the Small Bodies Node of NASA's Planetary Data System, which maintains all mission data related to small bodies in the Solar System.

Candidates for this position should have a Ph.D. in Physics, Astronomy, Planetary Science or a related field, which must be obtained by the time of the start date. IDL or similar experience is preferred. We recognize that strength comes through diversity and actively seek and welcome candidates with diverse backgrounds, experiences, and identities. We encourage women and minority candidates to apply.

Those interested in applying should send a CV, a short statement (no more than 2 pages) of research goals and their experience with computer simulations and small body studies, and arrange for three letters of reference to be sent.
electronically to: farnham@astro.umd.edu [16] and jess@astro.umd.edu [17]. The position will remain open until filled.

This appointment will be for two years with a possible third year extension based on performance and funding availability. Requests for additional information should be sent to Tony Farnham (farnham@astro.umd.edu [16]).

The University of Maryland, College Park, an equal opportunity/affirmative action employer, complies with all applicable federal and state laws and regulations regarding nondiscrimination and affirmative action; all qualified applicants will receive consideration for employment. The University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, national origin, physical or mental disability, protected veteran status, age, gender identity or expression, sexual orientation, creed, marital status, political affiliation, personal appearance, or on the basis of rights secured by the First Amendment, in all aspects of employment, educational programs and activities, and admissions.

B) NASA JOB OPENING: ORBITAL DEBRIS PROGRAM OFFICE MODELING LEAD, JOHNSON SPACE CENTER


Position summary:

Serves as Lead in the ARES Orbital Debris Program Office (ODPO) in the area of computer model development, providing Agency unique expertise in measuring, modeling, and providing guidance in mitigating the orbital debris environment to support NASA missions.

Qualifications:

- Knowledge of orbital mechanics and computer modeling of orbital debris populations. Specific knowledge of orbital debris software such
as Orbital Debris Engineering Model (ORDEM) and Debris Assessment Software (DAS).

- Experience performing management of software development projects.

- Ability to effectively communicate scientific results and technical instructions, orally and in writing, to scientific peers, subordinates, management, and to the general public.

- Ability to apply originality, creativeness, and ingenuity to solve orbital debris modeling and data collection related problems.

Education Requirements:

- A bachelor's degree from an accredited college or university with major study in engineering, physical science, mathematics, life sciences, computer science, or other field of science.

- Ph.D. or equivalent experience in computer science, astronomy, physics or engineering and five or more years in computer modeling, particularly orbital debris modeling is highly desired.

C) JOB ANNOUNCEMENT: ASTROMATERIALS ACQUISITION AND CURATION OFFICE
CARBONACEOUS ASTEROID SCIENTIST, JOHNSON SPACE CENTER

Announcement open 7/3-7/24. Apply here:


Position summary:

Serves as a Space Scientist in the Astromaterials Acquisition and Curation Office, studies the origin, composition, structure and evolution of the bodies of the solar system; plans and conducts mission operations; and serves as a Curator of an astromaterial sample collection.

Qualifications:

- Knowledge of the chemical and physical properties of the primitive materials that may be returned from the carbonaceous asteroids targeted by robotic or human exploration (i.e., Carbonaceous Chondrites and/or Interstellar Dust Particles).

- Experience with state-of-the-art techniques used to analyze carbonaceous chondrites and other primitive solar system samples.

- Ability to make connections between meteorite and asteroid samples to inform Curation (lab management, protocols and techniques) of the asteroid samples and determine appropriate sample requests.

- Demonstrated ability to publish peer-reviewed science on primitive Solar System samples.
Education Requirements:

- A bachelor's degree from an accredited college or university with major study in engineering, physical science, mathematics, life sciences, computer science, or other field of science.

- Ph.D. in Planetary Science or similar field is highly desired.

Send submissions to:

Anne Verbiscer, DPS Secretary (dpssec@aas.org [20])

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 [21]. The more general AAS privacy policy is available online at https://aas.org/about/policies/privacy-policy [22]. Current and back issues of the DPS Newsletter can be found at https://dps.aas.org/newsletters [23]