

Newsletter 21-04

Issue 21-04, February 21, 2021

+-----CONTENTS-----+

1. SAVE THE DATE FOR DPS 2021 MEETING
2. BLACK HISTORY MONTH: DPS AND NSBP
3. PLANETARY AND ASTROBIOLOGY DECADAL SURVEY SESSION
4. INSIGHTSEERS PROGRAM
5. ROCK, DUST AND ICE: INTERPRETING PLANETARY DATA
6. ASTROMETRY REQUEST FOR TNO OBSERVERS
7. 2021B NASA KECK CALL FOR PROPOSALS
8. ORCAS SCIENCE CASE WITH KECK: CALL FOR WHITE PAPERS
9. JOBS, POSITIONS, OPPORTUNITIES

+-----+

1-----1-----1-----1-----1-----1-----1-----1-----1-----1

SAVE THE DATE FOR DPS 2021 MEETING

The DPS committee is planning to have a meeting in 2021, so please save the date: 3-8 October, 2021. The DPS Committee is working toward making a go/no go decision on whether to hold the 2021 DPS meeting in person in Providence, RI or as a virtual meeting (similar to the 2020 meeting). In conjunction with the AAS staff, we have established a schedule for making the decision in an effort to allow timely planning for the community and the meeting organizers. After receiving a final risk assessment from the AAS leadership, the DPS Committee will make a decision in spring, and this will in turn enable the AAS staff to complete necessary logistics work and negotiations. After this work by AAS is complete, we anticipate being able to give a final decision to the DPS community by late spring.

2-----2-----2-----2-----2-----2-----2-----2-----2-----2

BLACK HISTORY MONTH: DPS AND NSBP

In celebration of Black History Month, the DPS Planetary Culture and Climate Subcommittee and the National Society of Black Physicists would like to advertise online features that call attention to contributions from members of the Black community in astronomy and physics.

The NSBP publishes blog posts profiling the lives and contributions of prominent figures, such as Dr. Edward Bouchet, Dr. Willie Hobbs Moore, Dr. Elmer Imes, Mary Jackson and Dr. George Carruthers, among others:

<https://nsbp.org/blogpost/1914810/Black-History-Month-2021> [1]

Check back throughout the month as more profiles are added!

In its Black History Month feature, the American Astronomical Society has also released a set of current member profiles: <https://aas.org/BHM2021-member-profiles> [2]

3-----3-----3-----3-----3-----3-----3-----3-----3-----3

PLANETARY AND ASTROBIOLOGY DECADAL SURVEY SESSION

We would like to call the community's attention to an upcoming session of the Planetary and Astrobiology Decadal Survey on planetary research and analysis programs. Members of the DPS leadership and white paper lead authors have been invited to make presentations to the panel on behalf of the DPS community. If there are specific concerns you would like us to raise with the panel, please send feedback to the DPS Chair, Amy Mainzer (DPS.Chair@aas.org [3]). The panel will be held on March 3, 2021, and a portion of the session is open to the public. Connection information and the day's agenda has not been posted yet but will be found here:

<https://www.nationalacademies.org/event/03-03-2021/planetary-science-and-astrobiology-decadal-survey-2023-2032-meeting-10> [4]

4-----4-----4-----4-----4-----4-----4-----4-----4-----4-----4

INSIGHTSEERS PROGRAM

Inspired by the success of similar programs on other missions (Dragonfly, Psyche, and Europa Clipper), the InSight team (<http://mars.nasa.gov> [5]) is organizing a pilot program intended to expose early career scientists to the experience of working on a mission science team. We are inviting a select number of senior graduate students and early career scientists to be InSightSeers to observe our next mission science team meeting in March. They will be paired with a mentor from the science team and allowed to observe the virtual science team meeting in its entirety from 8-12 March 2021. We hope that this will provide valuable insight into the work and team dynamics that take place on missions and help early career scientists make informed decisions about their career paths.

This opportunity is open to graduate students in or beyond their third year of earning their post-graduate degree (PhD or Master's) or early career scientists within seven years of receiving their post-graduate degree. Because of ITAR concerns, at this time the opportunity is limited to U.S. citizens and green card holders. Interested candidates should fill out the form at this link: <https://forms.gle/DAYvLHZR8JKMZ7Gj8> [6] and include a short description of their background and research interests, how such an experience could be of benefit to them, and any special interests in particular areas of the InSight mission. Respondents will be selected based upon the anticipated impact to their career path and the alignment of their research interests with the scientific objectives of the mission. InSight recognizes and supports the benefits of having diverse and inclusive communities and expects that such values will be reflected in this opportunity. Questions can be sent to ingrid_daubar@brown.edu [7] with the subject line InSightSeers. This form indicating your interest must be filled out by Wednesday 24 February 2021: <https://forms.gle/DAYvLHZR8JKMZ7Gj8> [6]

5-----5-----5-----5-----5-----5-----5-----5-----5-----5-----5

ROCK, DUST AND ICE: INTERPRETING PLANETARY DATA

How can we leverage multi-wavelength observations, radiative transfer theory and laboratory work to characterize planetary solids? This 4-day virtual workshop will bring together observers, modelers and laboratory astronomers to discuss the interpretation of observations of rocks, ices and dust on and around Solar System objects. A large variety of complementary observational techniques will be featured, via invited and contributed presentations, as well as different methods to constrain fundamental properties such as composition, porosity, thermal inertia and grain size distribution. The workshop is organized by the SOFIA Science Center, and a special emphasis will be put on mid- and far-IR data. Each daily 3-hour session will include ample time for moderated interdisciplinary discussions. The fourth day will be dedicated to a moderated discussion on databases, archives and public codes.

We welcome attendance from scientists at any career level, especially early career scientists. Attendees are encouraged to submit contributions for posters and short talks, with an abstract submission

deadline of March 9, 2021. Registration is free but necessary to attend.

For more information and to register, please see:
<https://sofia-science-series.constantcontactsites.com/> [8]

6-----6-----6-----6-----6-----6-----6-----6-----6-----6

ASTROMETRY REQUEST FOR TNO OBSERVERS

Following on the successful exploration of the dwarf planet Pluto, its small satellites, Charon, and the classical TNO Arrokoth, new spacecraft mission concepts are being studied to again target the dwarf planets and minor bodies of the trans-Neptunian region. One such mission concept is the Interstellar Probe, currently being studied by the Johns Hopkins University Applied Physics Laboratory (APL), to explore the outer heliosphere and the local interstellar medium, and it could include a planetary flyby. The following TNO dwarf planets are high-priority exploration targets for their size, likely geophysical complexity, compositional heterogeneity, and their relatively low ecliptic latitude, which makes them easier to target than higher latitude targets.

- 2002 MS4
- Eris
- Gonggong (2007 OR10)
- Ixion
- Orcus
- Pluto
- Quaoar
- Sedna
- Varda
- Varuna

Due to the fast speed of an Interstellar Probe, and thus the difficulty in changing trajectories en route, it is imperative that orbit solutions for these potential targets be well-constrained by the potential start of a mission in the early 2030s. To this end, we ask you to consider the following:

- Process imaging data in-hand and submitting astrometry to the Minor Planet Center (MPC). Filling in gaps in the MPC astrometry of these targets would further decrease their orbital uncertainties.
- Image these targets as back-up observations for your future observing programs. Such observations could fill time while waiting for a target to rise or while waiting for usable weather conditions. Astrometry from these observations would help to extend the time baseline and thus decrease orbital uncertainties.
- Astrometry from occultations are high-priority measurements. New, high-precision observations represent the best means of reducing orbital uncertainties.

For the Interstellar Probe Concept Study,
Kirby Runyon, Bryan Holler
Lead and Deputy Lead for Planetary Science on Interstellar Probe
kirby.runyon@jhuapl.edu [9], bholler@stsci.edu [10]

7-----7-----7-----7-----7-----7-----7-----7-----7-----7

2021B NASA KECK CALL FOR PROPOSALS

The NASA Exoplanet Science Institute is soliciting proposals to use NASA's portion of time on the Keck Telescopes for the 2021B observing semester (August 1, 2021 - January 31, 2022). All proposals are due by March 18, 2021 at 4 pm Pacific.

NASA intends the use of the Keck telescopes to be highly strategic in support of on-going space

missions and/or high priority, long-term science goals. Proposals are sought to support the science goals and missions in all of the following discipline areas:

- OUR OWN SOLAR SYSTEM
- EXOPLANET EXPLORATION
- PHYSICS OF THE COSMOS
- COSMIC ORIGINS

DIRECT MISSION SUPPORT PROPOSALS IN ANY OF THESE AREAS ARE ALSO ENCOURAGED

The opportunity to propose as a Principal Investigator for NASA time on the Keck Telescopes is open to all U.S.-based astronomers (a U.S.-based astronomer has their principal affiliation at a U.S. institution). Investigators from institutions outside of the U.S. may participate as Co-Investigators on proposals for NASA Keck time.

Please read the Call for Proposals for complete information, instrument availability, and application guidelines. We also have a short video on How to Apply for NASA Keck Time to get you started.

Key Dates:

- March 4: deadline to request General Mission Support letter from NASA HQ
- March 18: all proposals and supporting letters due to NExSci by 4 pm Pacific

Call for Proposals: <https://nexsci.caltech.edu/missions/KeckSolicitation/> [11]

Questions: KeckCFP@ipac.caltech.edu [12]

8-----8-----8-----8-----8-----8-----8-----8-----8-----8

ORCAS SCIENCE CASE WITH KECK: CALL FOR WHITE PAPERS

We are soliciting White Papers describing breakthrough science cases that would utilize a proposed ORCAS (Orbiting Configurable Artificial Star) adaptive optics (AO) system with the W. M. Keck Observatory. The preliminary science team has come up with a few unique cases including - accessibility to bright extended objects with AO, resolving small bodies throughout the solar system, and integral field spectroscopy of solar system objects. The capabilities of the coupled ORCAS system with Keck AO will enable a pixel size on the order of at least 5.2 mas (at 0.5 micron). White paper contributions will provide valuable input to help define both the scientific program and the instruments to support them. There will be a workshop on ORCAS to discuss potential science cases on March 12, 2021. White papers should be submitted by April 5, 2021 and details/templates can be found here: https://asd.gsfc.nasa.gov/orcas/events/white_papers/ [13] .

9-----9-----9-----9-----9-----9-----9-----9-----9-----9

JOBS, POSITIONS, OPPORTUNITIES

A) Webb Fellowships: Closing Date 4th March 2021

An exciting opportunity will be advertised this week by STFC to exploit the science from the Webb space telescope and to promote community engagement. STFC will be offering 2 dedicated fellowship positions to be held in UK research institutions for up to 5 years. The UK is playing a major role in the Webb and particularly its mid-InfraRed instrument, MIRI and we are looking for excellent and dynamic early career astronomers to champion this amazing facility. Details will be found on the UKRI Funding Finder:

<https://www.ukri.org/opportunity/webb-fellowship-using-the-james-webb-space-telescope> [14]

B) Two Postdoctoral Research Associates in Planetary Sciences

The Small Bodies Group in the Department of Astronomy at the University of Maryland, College Park invites applications for up to two Postdoctoral Research Associate positions to work with Tony Farnham and Jessica Sunshine on studies involving the composition and evolution of small bodies in the Solar System.

For more information:

<https://wirtanen.astro.umd.edu/postdoc/> [15]

C) Two Postdoctoral or PhD Research Positions

The Astrophysical Dust Group at the Institute for Particle Physics and Astrophysics (IPA), ETH Zurich, in Switzerland, seeks two highly motivated candidates to apply for a postdoctoral researcher position or a PhD position, within the framework of the ERC funded project: The heliosphere and the dust: characterisation of the solar and interstellar neighbourhood. The projects include cosmic dust data analysis, modelling of the interstellar dust transport through the heliosphere (computer simulations), and applying the results to other astrospheres, and the solar system in the past. For more details and submission of the application, see:

Postdoc position: https://www.jobs.ethz.ch/job/view/JOPG_ethz_ryjk2Yj2JM3MH3WG3w [16]

PhD position: https://www.jobs.ethz.ch/job/view/JOPG_ethz_Pw3MvM3kDRZTXpC26H [17]

Candidates from underrepresented groups are strongly encouraged to apply.

Application deadline: March 31, 2021.

For questions (not the application): vsterken [-at-] [ethz.ch](mailto:vsterken@ethz.ch) [18]

-----+

Send submissions to:

Maria Womack, DPS Secretary (dpssec@aas.org) [19]

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

Footer

- [Reports](#)
- [Photos](#)
- [History](#)
- [Bylaws](#)
- [Giving](#)

Source URL: <https://dps.aas.org/newsletters/21-04>

Links

[1] <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnsbp.org%2Fblogpost%2F1914810%2FBlack-History-Month-2021&data=04%7C01%7Ccatherine.gosmeyer%40nasa.gov%7Cdc8425dbe2764623b77808d8d6bf5a3d%7C7005d45845be48ae8140d43da96dd17b%7C0%7C0%7C637495>

464654580869%7CUnknown%7CTWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6Ikl1haWwiLCJXVCI6Mn0%3D%7C3000&data=sBv3lCfh6%2FQ79wFR%2B9EffjYc3Z99iRoLAhEErFAMglQ%3D&reserved=0

[2] <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Faas.org%2FBHM2021-member-profiles&data=04%7C01%7Ccatherine.gosmeyer%40nasa.gov%7Cdc8425dbe2764623b77808d8d6bf5a3d%7C7005d45845be48ae8140d43da96dd17b%7C0%7C0%7C637495464654590822%7CUnknown%7CTWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6Ikl1haWwiLCJXVCI6Mn0%3D%7C3000&data=yWECB4CUae0ivEwnKG5EF3oCMQelnthclxtTR%2Bw5SwQ%3D&reserved=0>

[3] <mailto:DPS.Chair@aaas.org>

[4] <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.nationalacademies.org%2Fevent%2F03-03-2021%2Fplanetary-science-and-astrobiology-decadal-survey-2023-2032-meeting-10&data=04%7C01%7Ccatherine.gosmeyer%40nasa.gov%7Cdc8425dbe2764623b77808d8d6bf5a3d%7C7005d45845be48ae8140d43da96dd17b%7C0%7C0%7C637495464654590822%7CUnknown%7CTWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6Ikl1haWwiLCJXVCI6Mn0%3D%7C3000&data=4WiNgxUzqjracv22dRpMhAO3k%2FZGNuLpdCsVuuc29pE%3D&reserved=0>

[5] <http://mars.nasa.gov/>

[6] <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fforms.gle%2FDAyvLHZR8JKMz7Gj8&data=04%7C01%7Ccatherine.gosmeyer%40nasa.gov%7Cdc8425dbe2764623b77808d8d6bf5a3d%7C7005d45845be48ae8140d43da96dd17b%7C0%7C0%7C637495464654600778%7CUnknown%7CTWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6Ikl1haWwiLCJXVCI6Mn0%3D%7C3000&data=SnEDQtNkpj5CMdZfj6C6fEgdwUvG7wCHA4IbA3wwdzQ%3D&reserved=0>

[7] mailto:ingrid_daubar@brown.edu

[8] <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fsofia-science-series.constantcontactsites.com%2F&data=04%7C01%7Ccatherine.gosmeyer%40nasa.gov%7Cdc8425dbe2764623b77808d8d6bf5a3d%7C7005d45845be48ae8140d43da96dd17b%7C0%7C0%7C637495464654600778%7CUnknown%7CTWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6Ikl1haWwiLCJXVCI6Mn0%3D%7C3000&data=cc4MPAFGRZbAOPdKbFjMHNSGW4gW3hMGFFFIIDhhQnU%3D&reserved=0>

[9] <mailto:kirby.runyon@jhuapl.edu>

[10] <mailto:bholler@stsci.edu>

[11] <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fnexsci.caltech.edu%2Fmissions%2FKeckSolicitation%2F&data=04%7C01%7Ccatherine.gosmeyer%40nasa.gov%7Cdc8425dbe2764623b77808d8d6bf5a3d%7C7005d45845be48ae8140d43da96dd17b%7C0%7C0%7C637495464654610738%7CUnknown%7CTWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6Ikl1haWwiLCJXVCI6Mn0%3D%7C3000&data=Fa95HZYKh8u2LyvCrMIPIjwBK3SFzoHrIDmbG0jvlcs%3D&reserved=0>

[12] <mailto:KeckCFP@ipac.caltech.edu>

[13] https://asd.gsfc.nasa.gov/orcas/events/white_papers/

[14] <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.ukri.org%2Fopportunity%2Fwebb-fellowship-using-the-james-webb-space-telescope&data=04%7C01%7Ccatherine.gosmeyer%40nasa.gov%7Cdc8425dbe2764623b77808d8d6bf5a3d%7C7005d45845be48ae8140d43da96dd17b%7C0%7C0%7C637495464654610738%7CUnknown%7CTWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6Ikl1haWwiLCJXVCI6Mn0%3D%7C3000&data=JkD4XmedWaESdWOx3JorEK2CdeV%2BHIS4jH5pJlqMu3o%3D&reserved=0>

[15] <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwirtanen.astro.umd.edu%2Fpostdoc%2F&data=04%7C01%7Ccatherine.gosmeyer%40nasa.gov%7Cdc8425dbe2764623b77808d8d6bf5a3d%7C7005d45845be48ae8140d43da96dd17b%7C0%7C0%7C637495464654610738%7CUnknown%7CTWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6Ikl1haWwiLCJXVCI6Mn0%3D%7C3000&data=X%2FWuCLjB%2B%2BnO87XPnAtv3uVY8VOUybgPXHnkpWPidk%3D&reserved=0>

[16] https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.jobs.ethz.ch%2Fjob%2Fview%2FJOPG_ethz_ryjk2Yj2JM3MH3WG3w&data=04%7C01%7Ccatherine.gosmeyer%40nasa.gov%7Cdc8425dbe2764623b77808d8d6bf5a3d%7C7005d45845be48ae8140d43da96dd17b%7C0%7C0%7C637495464654620687%7CUnknown%7CTWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQljojV2luMzliLCJBTiI6Ikl1haWwiLCJXVCI6Mn0%3D%7C3000&data=w9835fWzbZWxaqHQIAbgQFoAvxkOxt%2BbSCI%2F0

TAqejk%3D&reserved=0

[17] https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.jobs.ethz.ch%2Fjob%2Fview%2FJOPG_ethz_Pw3MvM3kDRZTXpC26H&data=04%7C01%7Ccatherine.gosmeyer%40nasa.gov%7Cdc8425dbe2764623b77808d8d6bf5a3d%7C7005d45845be48ae8140d43da96dd17b%7C0%7C0%7C637495464654620687%7CUnknown%7CTWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTil6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=KGB%2Ba5D0j%2F8IOB6ACbPfU%2F2ni%2FO%2F6k%2FjmXGMRPj0HRg%3D&reserved=0

[18] <https://gcc02.safelinks.protection.outlook.com/?url=http%3A%2F%2Fethz.ch%2F&data=04%7C01%7Ccatherine.gosmeyer%40nasa.gov%7Cdc8425dbe2764623b77808d8d6bf5a3d%7C7005d45845be48ae8140d43da96dd17b%7C0%7C0%7C637495464654630646%7CUnknown%7CTWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTil6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=y6gfsgdAkf0qYnSH7H5QD5bsddhS72%2B%2F3yL3%2Bff9B6A%3D&reserved=0>

[19] <mailto:dpssec@aas.org>

[20] <mailto:privacy@aas.org>

[21] <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.aas.org%2Fabout%2Fpolicies%2Fprivacy-policy&data=04%7C01%7Ccatherine.gosmeyer%40nasa.gov%7Cdc8425dbe2764623b77808d8d6bf5a3d%7C7005d45845be48ae8140d43da96dd17b%7C0%7C0%7C637495464654630646%7CUnknown%7CTWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTil6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=oxVduRXOmrEOqh0QdrpGlgqe%2BHmCP6c8rq%2FhLvqmHwA%3D&reserved=0>

[22] <https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fdps.aas.org%2Fnewsletters&data=04%7C01%7Ccatherine.gosmeyer%40nasa.gov%7Cdc8425dbe2764623b77808d8d6bf5a3d%7C7005d45845be48ae8140d43da96dd17b%7C0%7C0%7C637495464654630646%7CUnknown%7CTWFpbGZsb3d8eyJWljojMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTil6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=LWhodOmHNH5BlpcEAmw2uOu69uqqdBvBZ%2Fq4i1AWOuo%3D&reserved=0>