Newsletter 21-32

Issue 21-32, Dec 19, 2021

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MAKING SPACE: A WORKSHOP ON SPACE, ART, & SOCIETY

Making Space is an in-person multi-day workshop about space, sciart, and making where we use and create data-driven art as a tool to communicate scientific concepts and explore humanity's relationship to space. Participants will learn about how we can explore other worlds through art, interpret spacecraft observations in a new light, communicate ideas through making, do collaborative discussion and art activities, and practice creating sciart through hands-on art labs using a variety of techniques and mediums. The workshop is targeted towards a mixed, adult audience with backgrounds (professional or otherwise) in art and/or science. Artists, makers, scientists, science communicators, and educators are encouraged to apply!

The first workshop is Feb 25-27, 2022 at the Catalyst Arts & Maker Space in Tucson, AZ, with dates for Denver, CO and Pasadena, CA in the works (sign up to be notified). Applications for Tucson are open now until Dec 31st. These workshops are supported by NASA's Solar System Exploration Research Virtual Institute [1] (SSERVI).

Website: https://trex.psi.edu/making-space [2]

Email Contact: jmolaro@psi.edu [3]

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NSF GLOW: GEOSCIENCE LESSONS FOR/FROM OTHER WORLDS

This DCL (Dear Colleague Letter) is to inform the community that NSF's Divisions of Earth Sciences (EAR), Atmospheric and Geospace Sciences (AGS), and Astronomical Sciences (AST) encourage the submission of proposals that bring together researchers and experts to develop projects which: 1) use the study of other worlds as a way to broaden and deepen our understanding of the Earth and its evolution, including all processes and systems from the core to the magnetosphere, and/or 2) use our geoscience knowledge to understand the environments of other worlds.

Science drivers include but are not limited to:

- What can the study of other worlds reveal about the first billion years of Earth history?
- What can the study of other worlds reveal about Earth's past and its future climate?
What can the study of other worlds reveal about interactions between the Earth and space environment?
What can the study of Earth’s systems reveal about environments and processes that shape other worlds?
How can our basic science understanding of Earth processes and systems guide the identification of other habitable worlds?

Successful projects will include creative, integrative, and effective broader impacts activities developed within the context of the mission, goals, and resources of the organizations involved, and should be reflected in the expertise of collaborators, the proposal budget, and budget justification.


ABSCICON 2022 SESSION: TITAN AS A PREBIOTIC LABORATORY

Please consider submitting to our Titan focused AbSciCon 2022 session, “Titan as a Prebiotic Laboratory.”


Submission deadline: January 19

From the ionosphere to its rocky core, Titan offers a unique opportunity to explore pathways for prebiotic chemistry. In its N2-CH4-based atmosphere, photolytic and radiolytic chemistry creates a plethora of organic compounds, including large, complex haze particles. These compounds eventually make their way to the surface where geological processes rework and redistribute Titan’s prebiotic manna. Primordial organic material in the interior may be dissolved in the subsurface ocean and serve as the ultimate source of Titan’s atmospheric methane. Whether either of these realms —atmosphere, surface, interior— interacts with the other through the icy crust remains unknown. As the most organic-rich ocean world in the solar system beyond Earth, Titan represents a compelling world to investigate prebiotic chemistry. This session explores how investigating Titan’s different realms provides new insight into our understanding of the limits of prebiotic evolution. Results from remote sensing data, laboratory experiments, modeling, ground-based observations are all welcome.

JOBS, POSITIONS, AND OPPORTUNITIES

Job seekers and employers are encouraged to browse DPS's job listings [6] and advertise open positions [7]. Recent openings and opportunities are listed below and more are at the link above.

A. Astronomer-in-Residence in the Central Idaho Dark Sky Reserve

https://jobregister.aas.org/ad/946e840a [8]

We invite applications for an astronomer-in-residence (AIR) to lead outreach in the Central Idaho Dark Sky Reserve (https://idahodarksky.org/ [9]) in 2022. The AIR program is part of a NASA Science Activation project, the Central Idaho Dark Sky Reserve STEM Network (CIDSRSN) led by Prof. Brian Jackson of Boise State University.

The AIR is analogous to an artist-in-residence: they will spend 4 weeks (dates negotiable) in CIDSR, hosting public lectures, stargazing, etc. Actual activities are flexible, but hosting two events per week is reasonable. UCLA has partnered with us to conduct light pollution studies, so plans to help with that are
encouraged. The AIR will have logistical support from Boise State.

Travel, lodging, and a $3k honorarium are provided. Hotel Ketchum (https://www.hotelketchum.com/ [10]) has agreed to provide a room, but other arrangements possible. The AIR will be a contractor for Boise State and may continue their day job (remotely). If an in-person residency becomes untenable, it will be rescheduled. Applications from all career stages welcome, but preference given to those with outreach experience.

Send this info directly to bjackson@boisestate.edu [11]:

- Curriculum vitae with catalog of outreach experience
- Statement (2 pages) of outreach interests and plans - An emphasis on inclusive outreach is a positive.
- Contact info for 3 references

Complete applications that arrive by 2022 Jan 7 will receive full consideration with offer by end of Jan 2022. Questions or feedback to bjackson@boisestate.edu [11].

B. Applied Data Scientist, NEO Surveyor, IPAC

IPAC at the California Institute of Technology invites applications for an Applied Data Scientist to work on the Near Earth Object (NEO) Surveyor program. NEO Surveyor is a NASA Planetary Defense mission that will launch in early 2026. The NEO Surveyor observatory consists of a passively cooled 50 cm telescope located at Sun-Earth L1 equipped with a wide-field camera that will image the sky simultaneously in two mid-infrared bands. Scientists at IPAC have access to Palomar Observatory and other research facilities.

As the Applied Data Scientist, your duties will include:

· Designing and developing software for the automated classification of sources extracted from NEO Surveyor imaging data using supervised machine learning methods.

· Working with NEO Surveyor scientists to validate, optimize, and refine all automated classifiers used to discover moving objects.

· Documenting the design and usage of software modules and their key interfaces.

· Documenting methodologies to validate the performance of the automated classifiers and update them according to changes in survey data quality or content.

The candidate will also be encouraged to plan and conduct an independent research program.

For more information and to apply: https://phf.tbe.taleo.net/phf03/ats/careers/v2/viewRequisition?org=CALTECH&cws=37&rid=6258 [12]

Send submissions to:

Maria Womack, DPS Secretary (dpssec@aas.org [13])

You're receiving this email because you are a DPS member. To unsubscribe or update your information, please send your request to privacy@aas.org [14]. The more general AAS privacy policy is available online at https://aas.org/about/policies/privacy-policy [15]. Current and back issues of the DPS