

## Newsletter 20-27

Issue 20-27, June 21, 2020

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

1. TITAN COMMUNITY MAILING LIST
2. TITAN DECADAL SURVEY WHITEPAPERS OPEN FOR ENDORSERS
3. OPAG VIRTUAL MEETING SEPTEMBER 1-3, 2020
4. OPAG WHITE PAPER INFORMATION
5. SUPPORT THE NEW COMMISSION PROPOSAL "ASTEROIDS, COMETS AND TRANS-NEPTUNIAN OBJECTS" UNDER IAU DIVISION F
6. EPSC 2020: CALL FOR ABSTRACTS
7. JOBS, POSITIONS, OPPORTUNITIES

+-----+

1-----1-----1-----1-----1-----1-----1-----1-----1-----1  
TITAN COMMUNITY MAILING LIST

Dear Colleagues,

We are excited to bring your attention to a new mailing list that has been created for researchers interested in Saturn's largest moon. The Titan Community Mailing List (Titan-L) is a resource for the Titan community to

- Support communication between members of our community
- Promote integrated research efforts between the diverse areas represented
- Obtain/disseminate information

Subscribe to the Titan mailing list here: <https://www.lpi.usra.edu/titan-community/> [1]

Rules: Titan Community Mailing List intended for the distribution of Titan-related scientific information and results, including citations of recently published work, mission details, meeting announcements, and job postings. The list does not accept attachments (to avoid spreading viruses and filling people's inboxes). The list is not a forum for political

discussions or opinions about individuals, administrations, or missions. If a discussion wanders off the subject or away from objectivity, the Administrators will close the discussion. Thank you for your understanding.

Sincerely,  
Vincent Chevrier (list admin), Shannon MacKenzie (list admin), and Jason Soderblom

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

### TITAN DECADAL SURVEY WHITEPAPERS OPEN FOR ENDORSERS

The Titan community has written three whitepapers for the upcoming Decadal Survey for which we would like to solicit endorsers among the scientific community. The three whitepapers discuss (1) the outstanding science questions to be explored at Titan after Cassini, (2) how those questions might be addressed with a New-Frontiers-class Titan orbiter, and (3) how those questions might be addressed with a Flagship-class Titan orbiter carrying a sea probe. Drafts for the whitepapers, along with space an opportunity to add the names of endorsers, can be found at the links below. We would welcome your input and support,

Jason W. Barnes, Conor A. Nixon, Shannon M. MacKenzie

1. <https://tinyurl.com/TitanScienceWhitepaper> [2] (sign by July 8)
2. <https://tinyurl.com/NewFrontiersTitanOrbiter> [3] (sign by August 8)
3. <https://tinyurl.com/TitanOrbiterProbes> [4] (sign by August 8)

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

### OPAG VIRTUAL MEETING, SEPTEMBER 1-3, 2020

The next OPAG meeting will be a virtual meeting to be held from Sept 1st-3rd, 2020.

The meeting agenda and details about how to register and attend this meeting will be posted at a later date.

The focus of this timely meeting will be on aspects of the decadal survey that are relevant to OPAG. Status reports will be requested from the Decadal Survey co-chairs and panel chairs.

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

## OPAG WHITE PAPER INFORMATION

The Outer Planets Assessment Group (OPAG) is soliciting topics for White Papers to be submitted to the upcoming 2023–2033 Planetary Science and Astrobiology Decadal Survey. The list of white papers currently being prepared by members of the OPAG community, and the status of their preparation are recorded at the following link: <https://docs.google.com/spreadsheets/d/1as89GEyX50SUrTOOEZBw9dw6bYmmH8vaQFH2nkeRFhU/edit?usp=sharing> [5]

Members of OPAG community who are interested in joining any white paper effort should contact the lead author.

We also encourage the OPAG community to examine the current list of white papers, and identify any gaps in the topics covered by those white papers. When any gap is identified, you may initiate an effort to close those gaps by starting a new white paper, or by contacting OPAG steering committee members to discuss how to proceed.

New entries to the above spreadsheet can still be made via the submission form at this link: <https://forms.gle/o4ZxADBUPNZ9jpRp9> [6]

To make changes to existing entries, please contact Kunio Sayanagi <[kunio.sayanagi@hamptonu.edu](mailto:kunio.sayanagi@hamptonu.edu)> [7].

In particular, lead authors may be interested in adding a URL (e.g., google form) people may follow to co-sign/endorse their white papers.

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

## SUPPORT THE NEW COMMISSION PROPOSAL “ASTEROIDS, COMETS AND TRANS-NEPTUNIAN OBJECTS” UNDER IAU DIVISION F

We are working to propose a new commission to the IAU that will have the responsibility for promoting scientific progress and research achievements in the study of asteroids, comets, transneptunian objects, interstellar objects, and dwarf planets in our solar system and their relationship to many other astronomical domain.

A task group was created to prepare the proposal for the next IAU GA to propose the

---

new Commission "Asteroids, Comets and Transneptunian Objects" under Division F.

I invite you to have a look and support the proposal, by signing the form at:

<http://asteroidfamilies.net/SmallBodiesCommission/proposal-for-a-new-commission/> [8]

Please distribute this message around to your colleagues.

Thanks

Antonella Barucci

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

#### EPSC 2020 VIRTUAL MEETING: CALL FOR ABSTRACTS

Dear Colleagues,

The Europlanet Science Congress (EPSC) 2020, initially planned to be held in Granada, Spain on 27 Sept. – 2 Oct. 2020, will be held as a three-week virtual meeting (21 Sept. – 9 Oct.) as the result of the Covid-19 pandemic.

See [https://www.epsc2020.eu/virtual\\_meeting/overview.html](https://www.epsc2020.eu/virtual_meeting/overview.html) [9] for more details.

We'd like to direct your attention towards the following sessions:

#### SESSION OPS4: ICY OCEAN WORLDS: PAST AND FUTURE EXPLORATIONS

Conveners: Gabriel Tobie, Carly Howett, Alice Lucchetti, Frank Postberg, Federico Tosi

Session Description: The exploration of the outer solar system by Galileo at Jupiter, Cassini-Huygens at Saturn, and New Horizons at Pluto-Charon, has revealed that several icy worlds harbor a subsurface salty ocean underneath their cold icy surface. By flying through the

icy-vapor plume erupting from Enceladus' south pole, Cassini proceeded for the first time

to the analysis of fresh materials coming from an extraterrestrial ocean, revealing its astrobiological potentials. Even if there is no direct evidence yet, similar oceanic habitats

might also be present within Europa, Ganymede and Titan, which will be characterized by

future missions currently under development for the exploration of icy Galilean moons

(JUICE, Europa Clipper) and of Saturn's moon Titan (Dragonfly).



Understanding these ocean worlds requires input from a variety of scientific disciplines: planetary geology and geophysics, atmospheric physics, life sciences, magnetospheric environment, space weathering, as well as supporting laboratory studies, numerical simulations, preparatory studies for future missions and technology developments in instrumentation and engineering. We welcome abstracts that span this full breadth of disciplines required for the characterization and future exploration of ice-covered ocean worlds.

The new deadline for abstract submission is \*\*\* 24 June 2020, 13:00 CEST \*\*\*.

Information on how to submit an abstract can be found at the following link:  
[https://www.epsc2020.eu/abstract\\_management/how\\_to\\_submit\\_an\\_abstract.html](https://www.epsc2020.eu/abstract_management/how_to_submit_an_abstract.html) [10]

Looking forward to meeting you virtually!

Thanks,  
Gabriel, Carly, Alice, Frank, Federico

#### SESSION SB7: SPACE MISSIONS TO SMALL BODIES: PLANETARY DEFENSE

Conveners: Patrick Michel, Andy Cheng, Julia de Leon, Michael Kueppers, Holger Sierks

Dates: September 21, 2020 - October 9, 2020

Abstracts are due June 24, 2020, 13:00 CEST

<https://meetingorganizer.copernicus.org/EPSC2020/session/38557> [11]

The NASA DART and the ESA Hera missions will allow performing the first complete asteroid deflection test by a kinetic impact, including the full characterization of the target and the impact outcome. The development of these missions is supported by a large number of activities in terms of modeling (impact process, dynamics, physical properties), instrumentation, close proximity operations and data analyses. In parallel, the inventory and spectral properties of Near-Earth Objects from Earth and from space (NEOSM) will progress substantially. This session welcomes contributions related to those fascinating topics.

Please forward this message to your colleagues and in particular to any early career researcher you may know who is working on a relevant topic.

## SESSION SB11: PHYSICAL PROPERTIES OF SMALL BODIES: OBSERVATIONS AND TECHNIQUES

Please consider submitting an abstract to the EPSC SESSION SB11: Physical properties of small bodies: observations and techniques virtual meeting September 21 - October, 2020.

Electromagnetic scattering phenomena play a key role in determining the properties of Solar System surfaces based on observations using different techniques and in a variety of wavelengths ranging from the ultraviolet to the radio. This session will promote a general advancement in the exploitation of observational and experimental techniques to characterize radiative transfer in complex particulate media. Abstracts are solicited on progresses in numerical methods to extract relevant information from imagery, photometry, polarimetry and spectroscopy in solid phase, reference laboratory databases, photometric modeling, interpreting features on planetary surfaces, mixing/unmixing methods... Software and web service applications are welcome.

Abstract submission deadline: June 24, 2019, 13:00 CEST

<https://meetingorganizer.copernicus.org/EPSC2020/session/38563> [12]

Virtual meeting info:

[https://www.epsc2020.eu/virtual\\_meeting/overview.html](https://www.epsc2020.eu/virtual_meeting/overview.html) [9]

Conveners: Stéphane Erard, Maria Gritsevich, Karri Muinonen, Antti Penttilä, Frédéric Schmidt

## SESSION MITM2: NANO TO MINI SATELLITE AND DEDICATED INSTRUMENTS: A NEW OPPORTUNITY FOR PLANETARY EXPLORATION

EPSC 2020 will be held as a virtual meeting. We would like to draw your attention to the session on "Nano to Mini satellite and dedicated instruments: a new opportunity for planetary exploration." where we are now accepting abstracts.

Link: <https://meetingorganizer.copernicus.org/EPSC2020/session/38420> [13]

Dates: 21 September 2020 - 9 October 2020

Abstract submission deadline: 24 June 13:00 CEST

This session will highlight planetary science and space mission concepts based on small satellites in the class of NanoSat, MiniSat and planetary SmallSats. Recent advances in small platforms make it possible for small satellites, including CubeSats, to be considered as independent or complementary elements in planetary exploration missions, for example the small probes as part of the Hayabusa 2 mission and Hera mission. Presentations on Deep Space Planetary CubeSats, e.g. the small satellites accompanying the new F-class ESA mission Comet Interceptor and those selected or proposed for the NASA SIMPLEX program are welcomed. Concepts for future mission may either be an augmentation to larger missions or as stand-alone missions of their own. We encourage presentations on new Planetary science mission architectures and associated technologies, as well as dedicated instrumentation that can be developed for these applications.

With our best regards

John Robert Brucato, Marilena Amoroso, Patricia Beauchamp, Vincenzo Della Corte,  
Simone Pirrotta

#### SESSION OPS3: "PLANET" TITAN

Dear colleagues,

Please consider submitting an abstract to the EPSC session OPS3: "Planet" Titan

This will be a virtual meeting September 21 - October, 2020.

Despite its satellite status, Titan has nothing to envy to planets: it has planetary dimensions, a substantial and dynamic atmosphere, a carbon cycle, a variety of geological features (dunes, lakes, rivers, mountains...), seasons and a hidden ocean. It even now has its own mission: Dragonfly, selected by NASA in the frame of the New Frontiers program.

In this session, scientific presentations are solicited to cover all aspects of current research on Titan: from its interior to its upper atmosphere, using data collected in the frame of the Cassini-Huygens mission (2004-2017) or from ground-based telescopes (e.g., ALMA) or

based on modelling and experimental efforts to support the interpretation of past and future observations of this unique world.

Abstract submission deadline: June 24, 2019, 13:00 CEST

<https://meetingorganizer.copernicus.org/EPSC2020/session/3853> [14]8

Virtual meeting info:

[https://www.epsc2020.eu/virtual\\_meeting/overview.html](https://www.epsc2020.eu/virtual_meeting/overview.html) [9]

Convener: Alice Le Gall | Co-conveners: Anezina Solomonidou, Sandrine Vinatier,  
Giuseppe Mitri, Marco Mastrogiuseppe, Sarah M. Hörst

#### SESSION TP4: IMPACT PROCESSES IN THE SOLAR SYSTEM

Conveners: Robert Luther, Elena Martellato, Jens Ormö

Co-conveners: Natasha Artemieva, Christopher Hamann, Isabel Herreros, Francisco Javier Rodriguez Tovar

Description: Impact processes shaped the solar system and modify planetary surfaces until today. This session aims at understanding planetary impact processes at all scales in terms of shock metamorphism, dynamical aspects, geochemical consequences, environmental effects and biotic response, and cratering chronology. Naturally, advancing our understanding of impact phenomena requires a multidisciplinary approach, which includes (but it is not limited to) observations of craters, strewn fields or airbursts, numerical modelling, laboratory experiments, geologic and structural mapping, remote sensing, petrographic analysis of impact products, and isotopic and elemental geochemistry analysis.

We welcome presentations across this broad range of study, and particularly encourage work that bridges the gap between the investigative methods employed in studying

planetary impact processes at all scales.

Please, use the following link for more information:  
<https://meetingorganizer.copernicus.org/EPSC2020/session/38503> [15]

The deadline for the abstract submission is: 24 June 2020, 13:00 CEST.

Please, feel free to forward this e-mail to interested impact science colleagues.

We apologize for any cross-postings. If you have any further questions please email the conveners.

We look forward to see you ... at your computer screen!

Kindest regards,

Robert, Elena, and Jens

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

#### JOBS, POSITIONS, OPPORTUNITIES

#### A) MULTIPLE SPACE PHYSICS AND ENGINEERING POSTDOCTORAL RESEARCH POSITIONS AVAILABLE WITHIN THE UNIVERSITY OF MICHIGAN'S CLIMATE AND SPACE SCIENCES AND ENGINEERING (CLASP) DEPARTMENT

Applications are invited for multiple postdoctoral research positions at the Department of Climate and Space Sciences and Engineering (<https://clasp.engin.umich.edu> [16]), University of Michigan (<https://umich.edu> [17]) to begin later in 2020. The research areas include:

- Development of ground and space-based magnetometers for the study of the Earth and the Moon's space environments (Mark Moldwin - [mmoldwin@umich.edu](mailto:mmoldwin@umich.edu) [18]);
- Using machine learning methods to enhance the accuracy and reliability of first-



principles based Space Weather modeling (Tamas Gombosi -[tamas@umich.edu](mailto:tamas@umich.edu) [19]);

- Modeling the thermosphere-ionosphere-magnetosphere system and nonlinear feedback across geospace (Mike Liemohn - [Liemohn@umich.edu](mailto:Liemohn@umich.edu) [20]);
- Using magnetohydrodynamics code to study common dynamics in atmospheres, oceans and plasmas, including layering of fluids, ExB staircase and jet stability (Cheng Li - [Cheng.cli@berkeley.edu](mailto:Cheng.cli@berkeley.edu) [21])
- Plasma diagnostics of the solar corona and solar wind using remote sensing (UCoMP, DKIST, Hinode, AIA, SPICE) and in-situ measurements (Enrico Landi [elandi@umich.edu](mailto:elandi@umich.edu) [22])

The initial appointment will be for two years and the salary commensurate with experience. Opportunity to work with multiple groups on hardware, data analysis and modeling projects. CLASP, the College and the University have postdoctoral mentoring and professional development programs that support research fellows for careers in research, academia, and other allied fields. To apply, see the UM Careers web-page [https://careers.umich.edu/job\\_detail/186881/research\\_fellow](https://careers.umich.edu/job_detail/186881/research_fellow) [23]. For additional information contact any of the faculty listed.

Complete applications ask for a cover letter stating research interests and experience, a CV, and the names and addresses of two references. Review of materials begins July 15, 2020 and continues until the positions are filled. The University of Michigan is an equal opportunity/affirmative action employer.

Join CLASP as we celebrate the 75th Anniversary of the Space Physics Research Laboratory that formally began UM's involvement in experimental space physics research. Today we are one of the largest departments in the world with expertise across the breadth of solar, space and planetary sciences. Information about our department and people can be found at <https://clasp.engin.umich.edu/> [24]

Michigan Engineering's vision is to be the world's preeminent college of engineering

serving the common good. This global outlook, leadership focus and service commitment permeate our culture. Our vision is supported by a mission and values that, together, provide the framework for all that we do. Information about our vision, mission and values can be found at: <http://strategicvision.engin.umich.edu/> [25].

The University of Michigan has a storied legacy of commitment to Diversity, Equity and Inclusion (DEI). The Michigan Engineering component of the University's comprehensive, five-year, DEI strategic plan—along with updates on our programs and resources dedicated to ensuring a welcoming, fair and inclusive environment—can be found at: <http://www.engin.umich.edu/college/about/diversity>. [26]

## B) LUNAR AND PLANETARY INSTITUTE, DIRECTOR

HOUSTON, TEXAS

### Job Description:

USRA is an independent, nonprofit research corporation where the combined efforts of in-house talent and university-based expertise merge to advance space science, technology and education. USRA works across disciplines including planetary science, Earth science, heliophysics, astrophysics, space exploration, engineering and technology, and integrates those competencies into applications ranging from fundamental and applied research to management and operations programs and facilities. USRA engages the creativity and authoritative expertise of the science, technology, engineering and education communities to develop and deliver sophisticated and forward-looking solutions to U.S. Federal agencies and other sponsors, in a timely and effective manner.

### Position Summary:

USRA is seeking a Director to provide scientific leadership for, and management of, the Lunar and Planetary Institute (LPI) and to maintain it as a premier research center

---

in support of NASA's strategic goals in planetary science and exploration of the solar

system. The Director will oversee multiple activities carried out by the LPI, including: conducting cutting-edge scientific research through grants and contracts; running highly successful conferences and workshops, including the annual Lunar and Planetary Science Conference; training and providing resources for early-career researchers; connecting

the public to planetary science through a variety of events and activities; and providing

extensive library and digital resources to the planetary science community. The LPI enjoys

a strong partnership with the Astromaterials Division at NASA's Johnson Space Center, facilitated by the close proximity of our two organizations.

In addition to ensuring the smooth operation of the Institute, the Director will identify new opportunities to leverage the base funding provided by NASA to strengthen and broaden the funding for research at the LPI. The Director is expected to lead and further develop the LPI vision and mission by engaging the LPI team, LPI Science Council and the planetary science community at large.

#### Essential Duties/Responsibilities:

- Meet all the obligations and commitments in the LPI Cooperative Agreement with NASA.
- Provide supervision of and guidance to a staff of permanent and temporary scientists, conference planners, education and public engagement professionals, library and communications professionals, and administrative staff, and provide direction to matrixed business, IT, and human resources staff. Mentor and develop staff.
- Maintain excellent relationships with NASA HQ, NASA/JSC, and other NASA customers through regular interactions.
- Maintain a presence in the appropriate research fields, which should include maintenance of an active research program with ongoing publication and funding activities.
- Develop and maintain a high profile with the planetary science community through participation on and leadership of review and advisory panels (e.g., National Academies and NASA panels).
- Develop tactical and strategic plans to ensure that the Institute remains responsive to NASA goals for planetary exploration.
- Identify and pursue new initiatives within the scope of the LPI Cooperative Agreement and in consultation with appropriate stakeholders.

#### Required Qualifications:

##### Education:

---

The DPS is a Division of the

- Ph.D. in one of the following fields: geosciences, planetary sciences, physics, astronomy or associated fields, plus at least 10 years of experience past the Ph.D. level.

Knowledge, Skills, and Abilities:

- Must have at least 5 years of proven management experience for multi-disciplinary programs and/or scientific organizations.
- Proven record of writing and obtaining large research/mission grants or contracts funding.
- Interest in science communication through public engagement and outreach.
- Familiarity with multiple planetary disciplines, e.g., astrochemistry, astrobiology, solar system exploration, etc.
- Demonstrated record of mentoring early - to mid-career scientists and developing future diverse workforce.

Technology:

- Proficiency in Microsoft Office and its applications.

Travel:

Frequent travel may be required.

Applicants should apply to the posting at <https://usracareers.silkroad.com/> [27] and include a

letter of interest, resume, or curriculum vita. Review of candidates will begin immediately. Additional information on USRA can be found at [www.usra.edu](http://www.usra.edu) [28].

USRA is an Equal Opportunity Employer Minorities/Females/Protected Veterans/Disabled/Sexual Orientation/Gender Identity.

Job Location:

Houston, Texas, United States

Position Type:

Full-Time/Regular

C) DATA SCIENCE JOB OPPORTUNITIES AT STSCI  
BALTIMORE, MARYLAND

The first position is for a Senior Staff Astronomical Data Scientist to work with MAST on the many missions we host and support. This candidate would work closely with other scientists and software engineers to provide scientific and technical expertise for MAST projects. Our Astronomical Data Scientists have leadership roles in crafting high-level data products, implementing data-mining techniques, improving the usability of MAST products and providing scientific guidance for the MAST and its missions. You will have the option to buy back up to 50% of you time (FTE) for scientific research through the use of any external funding or grants you may receive.

Second, there is also an opening for an Astronomical Data Scientist. In this position, you will be responsible for improving our calibration pipelines and data processing through applying innovative data science techniques. You will collaborate with teams that are passionate about the work they do in support of astronomers around the world. We offer an excellent and generous benefits package, tuition reimbursement, flexible work schedules and a stimulating and diverse work environment.

Follow the links for more details and application information:

- [Senior Staff Astronomical Data Scientist- #0049462](#) [29]
- [Astronomical Data Scientist - #0048665](#) [30]

-----+

Send submissions to:

Anne Verbiscer, DPS Secretary ([dpssec@aaas.org](mailto:dpssec@aaas.org) [31])

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

To unsubscribe or update your information, please send your request to [privacy@aaas.org](mailto:privacy@aaas.org) [32]. The more general AAS privacy policy is available

online at <https://aas.org/about/policies/privacy-policy> [33]. Current and back

issues of the DPS Newsletter can be found at <https://dps.aas.org/newsletters> [34]

-->

## Footer

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

**Source URL:** <https://dps.aas.org/newsletters/20-27>

## Links

[1] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_www.lpi.usra.edu\\_titan-2Dcommunity\\_&d=DwMGaQ&c=7ypwAowFJ8v-mw8AB-SdSueVQgSDL4HiiSaLK01W8HA&r=pYbGGsx9dyPXn0qq-9umv3MAo9uHk3MnQco1SMCZGx8&m=-KeAjlj\\_e-i5Gh0ygtgbcNEOuMSVlp0UYWA9Ff1gkZJU&s=f77kejkfKFN0z3VRbRyUQllslwU4S5uWMt9PwN5WXFg&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__www.lpi.usra.edu_titan-2Dcommunity_&d=DwMGaQ&c=7ypwAowFJ8v-mw8AB-SdSueVQgSDL4HiiSaLK01W8HA&r=pYbGGsx9dyPXn0qq-9umv3MAo9uHk3MnQco1SMCZGx8&m=-KeAjlj_e-i5Gh0ygtgbcNEOuMSVlp0UYWA9Ff1gkZJU&s=f77kejkfKFN0z3VRbRyUQllslwU4S5uWMt9PwN5WXFg&e=)

[2] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_tinyurl.com\\_TitanScienceWhitepaper&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX\\_i482R9K0btVp5jP6jx9FzBw&s=0dKw8lpAFrjCyHeyE3oAl\\_eD8rPUaLw1XY3zCKbWhOw&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__tinyurl.com_TitanScienceWhitepaper&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX_i482R9K0btVp5jP6jx9FzBw&s=0dKw8lpAFrjCyHeyE3oAl_eD8rPUaLw1XY3zCKbWhOw&e=)

[3] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_tinyurl.com\\_NewFrontiersTitanOrbiter&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX\\_i482R9K0btVp5jP6jx9FzBw&s=q9CRjf2y-aMSw8E-XSD9c15vuFC-BnnDou81O8ir7Ik&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__tinyurl.com_NewFrontiersTitanOrbiter&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX_i482R9K0btVp5jP6jx9FzBw&s=q9CRjf2y-aMSw8E-XSD9c15vuFC-BnnDou81O8ir7Ik&e=)

[4] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_tinyurl.com\\_TitanOrbiterProbes&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX\\_i482R9K0btVp5jP6jx9FzBw&s=1FkVKyjdVsDfBt4GRE2nC0\\_UxMtuYg7Tppvne6eX7n4&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__tinyurl.com_TitanOrbiterProbes&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX_i482R9K0btVp5jP6jx9FzBw&s=1FkVKyjdVsDfBt4GRE2nC0_UxMtuYg7Tppvne6eX7n4&e=)

[5] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_nam03.safelinks.protection.outlook.com\\_-3Furl-3Dhttps-253A-252F-252Fdocs.google.com-252Fspreadsheets-252Fd-252F1as89GEyX50SUrTOOEZBw9dw6bYmmH8vaQFH2nkeRFhU-252Fedit-253Fusp-253Dsharing-26data-3D02-257C01-257Ccchavez-2540seti.org-257C0a2670e9774e4e8014d308d813d7c72a-257Cdeac5258294749c2a474e8ab151104fb-257C0-257C0-257C637281164781408655-26sdata-3Dm7Of7K5ltg3qzJGuJK0J0JWDq6IP-252FBiW0qa2i6PNW5Q-253D-26reserved-3D0&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX\\_i482R9K0btVp5jP6jx9FzBw&s=rIFloAYJOCzE6GTHWltQ3wowJCITrynz700JIOMevh4&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__nam03.safelinks.protection.outlook.com_-3Furl-3Dhttps-253A-252F-252Fdocs.google.com-252Fspreadsheets-252Fd-252F1as89GEyX50SUrTOOEZBw9dw6bYmmH8vaQFH2nkeRFhU-252Fedit-253Fusp-253Dsharing-26data-3D02-257C01-257Ccchavez-2540seti.org-257C0a2670e9774e4e8014d308d813d7c72a-257Cdeac5258294749c2a474e8ab151104fb-257C0-257C0-257C637281164781408655-26sdata-3Dm7Of7K5ltg3qzJGuJK0J0JWDq6IP-252FBiW0qa2i6PNW5Q-253D-26reserved-3D0&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX_i482R9K0btVp5jP6jx9FzBw&s=rIFloAYJOCzE6GTHWltQ3wowJCITrynz700JIOMevh4&e=)

[6] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_nam03.safelinks.protection.outlook.com\\_-3Furl-3Dhttps-253A-252F-252Fforms.gle-252Fo4ZxADBUPNZ9jpRp9-26data-3D02-257C01-257Ccchavez-2540seti.org-257C0a2670e9774e4e8014d308d813d7c72a-257Cdeac5258294749c2a474e8ab151104fb-257C0-257C0-257C637281164781408655-26sdata-3D8OIdcSsu80Oi8QXGG-252F0bmfILTDObZrVfDREfVyIOs-253D-26reserved-3D0&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX\\_i482R9K0btVp5jP6jx9FzBw&s=\\_VYLh4GRO46awiTAjJa3W\\_ZEc7ymcgugbWhQFoNATw&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__nam03.safelinks.protection.outlook.com_-3Furl-3Dhttps-253A-252F-252Fforms.gle-252Fo4ZxADBUPNZ9jpRp9-26data-3D02-257C01-257Ccchavez-2540seti.org-257C0a2670e9774e4e8014d308d813d7c72a-257Cdeac5258294749c2a474e8ab151104fb-257C0-257C0-257C637281164781408655-26sdata-3D8OIdcSsu80Oi8QXGG-252F0bmfILTDObZrVfDREfVyIOs-253D-26reserved-3D0&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX_i482R9K0btVp5jP6jx9FzBw&s=_VYLh4GRO46awiTAjJa3W_ZEc7ymcgugbWhQFoNATw&e=)

- [7] <mailto:kunio.sayanagi@hamptonu.edu>
- [8] [https://urldefense.proofpoint.com/v2/url?u=http-3A\\_\\_asteroidfamilies.net\\_SmallBodiesCommission\\_proposal-2Dfor-2Da-2Dnew-2Dcommission\\_&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX\\_i482R9K0btVp5jP6jx9FzBw&s=6n6QLhoDW2YKa7tYyQMM-8kO1BSbpHRIn1-UudtjMs0&e=](https://urldefense.proofpoint.com/v2/url?u=http-3A__asteroidfamilies.net_SmallBodiesCommission_proposal-2Dfor-2Da-2Dnew-2Dcommission_&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX_i482R9K0btVp5jP6jx9FzBw&s=6n6QLhoDW2YKa7tYyQMM-8kO1BSbpHRIn1-UudtjMs0&e=)
- [9] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_www.epsc2020.eu\\_virtual-5Fmeeting\\_overview.html&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX\\_i482R9K0btVp5jP6jx9FzBw&s=Fy2qgOu6OqNPRtDSNZ1XAKfEMXtGtCeo0O0w8IRN0&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__www.epsc2020.eu_virtual-5Fmeeting_overview.html&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX_i482R9K0btVp5jP6jx9FzBw&s=Fy2qgOu6OqNPRtDSNZ1XAKfEMXtGtCeo0O0w8IRN0&e=)
- [10] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_www.epsc2020.eu\\_abstract-5Fmanagement\\_how-5Fto-5Fsubmit-5Fan-5Fabstract.html&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX\\_i482R9K0btVp5jP6jx9FzBw&s=utvCGcAXMceW5W5zsaQZEEQ8e1Mnju0Sw-TvqZqMclie&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__www.epsc2020.eu_abstract-5Fmanagement_how-5Fto-5Fsubmit-5Fan-5Fabstract.html&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX_i482R9K0btVp5jP6jx9FzBw&s=utvCGcAXMceW5W5zsaQZEEQ8e1Mnju0Sw-TvqZqMclie&e=)
- [11] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_meetingorganizer.copernicus.org\\_EPSC2020\\_session\\_38557&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX\\_i482R9K0btVp5jP6jx9FzBw&s=bS7abo2X3Y9077mAdkB2T21RbAeojKYalgUe9Jci3Q8&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__meetingorganizer.copernicus.org_EPSC2020_session_38557&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX_i482R9K0btVp5jP6jx9FzBw&s=bS7abo2X3Y9077mAdkB2T21RbAeojKYalgUe9Jci3Q8&e=)
- [12] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_meetingorganizer.copernicus.org\\_EPSC2020\\_session\\_38563&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX\\_i482R9K0btVp5jP6jx9FzBw&s=n73VFhmo2HIAZdcfcJgS8ZQWBhGm5\\_vtr\\_18v0oXX78&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__meetingorganizer.copernicus.org_EPSC2020_session_38563&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX_i482R9K0btVp5jP6jx9FzBw&s=n73VFhmo2HIAZdcfcJgS8ZQWBhGm5_vtr_18v0oXX78&e=)
- [13] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_meetingorganizer.copernicus.org\\_EPSC2020\\_session\\_38420&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX\\_i482R9K0btVp5jP6jx9FzBw&s=zqnljyk8-gNn3tbkCFU1EiU6XtIfOrQyX04m6SWn7xA&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__meetingorganizer.copernicus.org_EPSC2020_session_38420&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX_i482R9K0btVp5jP6jx9FzBw&s=zqnljyk8-gNn3tbkCFU1EiU6XtIfOrQyX04m6SWn7xA&e=)
- [14] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_meetingorganizer.copernicus.org\\_EPSC2020\\_session\\_3853&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX\\_i482R9K0btVp5jP6jx9FzBw&s=z7dBN7Oe5iquirunVkxxPD6h9V4urXpXbhxeQ6y80I&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__meetingorganizer.copernicus.org_EPSC2020_session_3853&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX_i482R9K0btVp5jP6jx9FzBw&s=z7dBN7Oe5iquirunVkxxPD6h9V4urXpXbhxeQ6y80I&e=)
- [15] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_meetingorganizer.copernicus.org\\_EPSC2020\\_session\\_38503&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX\\_i482R9K0btVp5jP6jx9FzBw&s=e84Ec5f7\\_6zI3uPOMBseBrsRyfLuRyAyPEAHR13ZKr0&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__meetingorganizer.copernicus.org_EPSC2020_session_38503&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX_i482R9K0btVp5jP6jx9FzBw&s=e84Ec5f7_6zI3uPOMBseBrsRyfLuRyAyPEAHR13ZKr0&e=)
- [16] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_clasp.engin.umich.edu&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX\\_i482R9K0btVp5jP6jx9FzBw&s=45PJAUkJir89PSzVCi6edoQYTD317efiBUVJWH3Cupk&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__clasp.engin.umich.edu&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX_i482R9K0btVp5jP6jx9FzBw&s=45PJAUkJir89PSzVCi6edoQYTD317efiBUVJWH3Cupk&e=)
- [17] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_umich.edu&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX\\_i482R9K0btVp5jP6jx9FzBw&s=kBAL\\_vIj9gdLj1luOt\\_boxmXeJSmWIrWiDYSELW\\_\\_dl&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__umich.edu&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX_i482R9K0btVp5jP6jx9FzBw&s=kBAL_vIj9gdLj1luOt_boxmXeJSmWIrWiDYSELW__dl&e=)
- [18] <mailto:mmoldwin@umich.edu>
- [19] <mailto:-tamas@umich.edu>
- [20] <mailto:Liemohn@umich.edu>
- [21] <mailto:Cheng.cli@berkeley.edu>
- [22] <mailto:elandi@umich.edu>
- [23] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_careers.umich.edu\\_job-5Fdetail\\_186881\\_research-5Ffellow&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX\\_i482R9K0btVp5jP6jx9FzBw&s=PccJfB9yS1PAFS1yMpnf9hmKgAGcl17deFu9UEzu1E&e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__careers.umich.edu_job-5Fdetail_186881_research-5Ffellow&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX_i482R9K0btVp5jP6jx9FzBw&s=PccJfB9yS1PAFS1yMpnf9hmKgAGcl17deFu9UEzu1E&e=)
- [24] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_clasp.engin.umich.edu\\_&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX\\_i482R9K0btVp5jP6jx9FzBw&s=3nqw6EQ5ya](https://urldefense.proofpoint.com/v2/url?u=https-3A__clasp.engin.umich.edu_&d=DwMGaQ&c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&m=e89MIKdKVqjXh-XQDtX_i482R9K0btVp5jP6jx9FzBw&s=3nqw6EQ5ya)

- dscby7n1SA3Fks0zWtXpsAuPMzNvj\_-hw&amp;e=  
[25] [https://urldefense.proofpoint.com/v2/url?u=http-3A\\_\\_strategicvision.engin.umich.edu\\_&amp;d=DwMGaQ&amp;c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&amp;r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&amp;m=e89MIKdKVqjXh-XQDtX\\_i482R9K0btVp5jP6jx9FzBw&amp;s=YAZUa9O\\_hERgx3gSwuUQ62A1NNYNQH8UnU5bYRLBRcc&amp;e=](https://urldefense.proofpoint.com/v2/url?u=http-3A__strategicvision.engin.umich.edu_&amp;d=DwMGaQ&amp;c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&amp;r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&amp;m=e89MIKdKVqjXh-XQDtX_i482R9K0btVp5jP6jx9FzBw&amp;s=YAZUa9O_hERgx3gSwuUQ62A1NNYNQH8UnU5bYRLBRcc&amp;e=)  
[26] [https://urldefense.proofpoint.com/v2/url?u=http-3A\\_\\_www.engin.umich.edu\\_college\\_about\\_diversity.&amp;d=DwMGaQ&amp;c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&amp;r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&amp;m=e89MIKdKVqjXh-XQDtX\\_i482R9K0btVp5jP6jx9FzBw&amp;s=fDcvULCUaTPIPPFw-s0GNrNe40rLrtCxaZm2zB10LYc&amp;e=](https://urldefense.proofpoint.com/v2/url?u=http-3A__www.engin.umich.edu_college_about_diversity.&amp;d=DwMGaQ&amp;c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&amp;r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&amp;m=e89MIKdKVqjXh-XQDtX_i482R9K0btVp5jP6jx9FzBw&amp;s=fDcvULCUaTPIPPFw-s0GNrNe40rLrtCxaZm2zB10LYc&amp;e=)  
[27] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_usracareers.silkroad.com\\_&amp;d=DwMGaQ&amp;c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&amp;r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&amp;m=e89MIKdKVqjXh-XQDtX\\_i482R9K0btVp5jP6jx9FzBw&amp;s=8CIRJMbvuiZxddNRNqTM0TnAhjtZOGGGDF9yAuBYM30&amp;e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__usracareers.silkroad.com_&amp;d=DwMGaQ&amp;c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&amp;r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&amp;m=e89MIKdKVqjXh-XQDtX_i482R9K0btVp5jP6jx9FzBw&amp;s=8CIRJMbvuiZxddNRNqTM0TnAhjtZOGGGDF9yAuBYM30&amp;e=)  
[28] [https://urldefense.proofpoint.com/v2/url?u=http-3A\\_\\_www.usra.edu\\_&amp;d=DwMGaQ&amp;c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&amp;r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&amp;m=e89MIKdKVqjXh-XQDtX\\_i482R9K0btVp5jP6jx9FzBw&amp;s=GWY3md0sQc0G2htmlwDyKSJU9bfcruHW96zqS00xmr88&amp;e=](https://urldefense.proofpoint.com/v2/url?u=http-3A__www.usra.edu_&amp;d=DwMGaQ&amp;c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&amp;r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&amp;m=e89MIKdKVqjXh-XQDtX_i482R9K0btVp5jP6jx9FzBw&amp;s=GWY3md0sQc0G2htmlwDyKSJU9bfcruHW96zqS00xmr88&amp;e=)  
[29] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_recruiting2.ultipro.com\\_SPA1004AURA\\_JobBoard\\_93330e50-2D7b3a-2D4ba8-2D94f2-2D6f32360aa4e1\\_OpportunityDetail-3FopportunityId-3Dcfb25bb9-2Dcabf-2D445f-2D8cda-2D728596475e7b&amp;d=DwMGaQ&amp;c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&amp;r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&amp;m=e89MIKdKVqjXh-XQDtX\\_i482R9K0btVp5jP6jx9FzBw&amp;s=1PbqQTAvmvEune0KS8QNGCTI8I5\\_th2ZMOWxlpAVI0A&amp;e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__recruiting2.ultipro.com_SPA1004AURA_JobBoard_93330e50-2D7b3a-2D4ba8-2D94f2-2D6f32360aa4e1_OpportunityDetail-3FopportunityId-3Dcfb25bb9-2Dcabf-2D445f-2D8cda-2D728596475e7b&amp;d=DwMGaQ&amp;c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&amp;r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&amp;m=e89MIKdKVqjXh-XQDtX_i482R9K0btVp5jP6jx9FzBw&amp;s=1PbqQTAvmvEune0KS8QNGCTI8I5_th2ZMOWxlpAVI0A&amp;e=)  
[30] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_recruiting2.ultipro.com\\_SPA1004AURA\\_JobBoard\\_93330e50-2D7b3a-2D4ba8-2D94f2-2D6f32360aa4e1\\_OpportunityDetail-3FopportunityId-3D8f453ffc-2D66ff-2D4205-2D9473-2D6b4ed75029bd&amp;d=DwMGaQ&amp;c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&amp;r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&amp;m=e89MIKdKVqjXh-XQDtX\\_i482R9K0btVp5jP6jx9FzBw&amp;s=4PLJ7yd0GgrwiXitjNRzsQmpiTVHzB2\\_ON31j6md80s&amp;e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__recruiting2.ultipro.com_SPA1004AURA_JobBoard_93330e50-2D7b3a-2D4ba8-2D94f2-2D6f32360aa4e1_OpportunityDetail-3FopportunityId-3D8f453ffc-2D66ff-2D4205-2D9473-2D6b4ed75029bd&amp;d=DwMGaQ&amp;c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&amp;r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&amp;m=e89MIKdKVqjXh-XQDtX_i482R9K0btVp5jP6jx9FzBw&amp;s=4PLJ7yd0GgrwiXitjNRzsQmpiTVHzB2_ON31j6md80s&amp;e=)  
[31] <mailto:dpssec@aas.org>  
[32] <mailto:privacy@aas.org>  
[33] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_aas.org\\_about\\_policies\\_privacy-2Dpolicy&amp;d=DwMGaQ&amp;c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&amp;r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&amp;m=e89MIKdKVqjXh-XQDtX\\_i482R9K0btVp5jP6jx9FzBw&amp;s=dhewfqf7pOg2Lzyfl19I7ihKRcBU8s4HROI6NELtMHc&amp;e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__aas.org_about_policies_privacy-2Dpolicy&amp;d=DwMGaQ&amp;c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&amp;r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&amp;m=e89MIKdKVqjXh-XQDtX_i482R9K0btVp5jP6jx9FzBw&amp;s=dhewfqf7pOg2Lzyfl19I7ihKRcBU8s4HROI6NELtMHc&amp;e=)  
[34] [https://urldefense.proofpoint.com/v2/url?u=https-3A\\_\\_dps.aas.org\\_newsletters&amp;d=DwMGaQ&amp;c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&amp;r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&amp;m=e89MIKdKVqjXh-XQDtX\\_i482R9K0btVp5jP6jx9FzBw&amp;s=kbA\\_DB57sR8lCcTR1EBdL-m3gdCXC5yBEaiVatXOOSQ&amp;e=](https://urldefense.proofpoint.com/v2/url?u=https-3A__dps.aas.org_newsletters&amp;d=DwMGaQ&amp;c=ApwzowJNAKKw3xye91w7BE1XMRKi2LN9kiMk5Csz9Zk&amp;r=fG5pH1N7YtwOEF6xelPAeRse0ND3CGAXrgq3T4Wd0y4&amp;m=e89MIKdKVqjXh-XQDtX_i482R9K0btVp5jP6jx9FzBw&amp;s=kbA_DB57sR8lCcTR1EBdL-m3gdCXC5yBEaiVatXOOSQ&amp;e=)