

EAPS WEEKLY NEWSLETTER

August 7, 2023

<u>Facebook Twitter LinkedIn Instagram Website</u>

EAPS MEETINGS & EVENTS

PURDUE CALENDAR 2023-24

EAPS K-12 OUTREACH CALENDAR OF EVENTS

REPORT YOUR OUTREACH AND ENGAGEMENT ACTIVITIES

NEWS/OPPORTUNITIES AT PURDUE

SPECIAL SEMINAR – STEPHEN KANE TODAY AT 10:30 A.M.

Monday, August 7th, <u>Stephen Kane</u> will be visiting Stephanie Olson's group and he has offered to give a talk titled: The Fundamental Connections between the Solar System and Exoplanetary Science (abstract below). The talk will be at 10:30a in HAMP 2201 (Storm Snacks).

Stephen is a planetary astrophysicist at UC Riverside, a member of the DAVINCI team, an engaging speaker, and a really fantastic human. It should be a great talk! Please consider attending if you're available.

MS AND PHD EAPS STUDENTS BROADEN YOUR GRAD EXPERIENCE

For those MS and PhD students in EAPS that would like to broaden their graduate experiences while at Purdue, EAPS is affiliated with the Computational Interdisciplinary Graduate Programs (CIGP) at Purdue. While working toward a graduate degree in EAPS, graduate

students can also have a concentration (specialization) in the area of Computational Science and Engineering (CSE). For more information, <u>click here</u>. A short video about the CIGP/CSE program can be found here.

Spring Application Deadline: March 1 **Fall Application Deadline:** October 1

EAPS GRAD STUDENT RESEARCH OPPORTUNITIES

If you are interested in an EAPS grad research opportunity, <u>click here</u> for more information.

PUBLICATIONS

- McGlasson, R.A., A.M. Bramson, G.A. Morgan, M.M. Sori (2023) Varied Histories of Outlier Polar Ice Deposits on Mars. Journal of Geophysical Research: Planets, 128, 5, https://doi.org/10.1029/2022JE007592.
- LaFleur, Allison T., Tanamachi, Robin L., Daniel T. Dawson II, and D. D. Turner, 2023: Factors affecting the rapid recovery of CAPE on 31 March 2016 during VORTEX-Southeast. Monthly Weather Review, 151, 1459–1477, https://doi.org/10.1175/MWR-D-22-0051.1
- Seymour, Nicole J. Thomas, Fred M. Phillips, Jeffrey R. Knott, Donald W. Sada, Laura Rademacher, Marty Frisbee, Brian P. Hedlund. 2023. "Synecological Response of Spring Benthic Prokaryotes and Macroinvertebrates to Paleozoic Roof Pendant-Derived Calcium." Ecosphere 14(5): e4464. https://doi.org/10.1002/ecs2.4464
- L.C. Chaves, M.S. Thompson, M.J. Loeffler, C.A. Dukes, P.S. Szabo, B.H.N. Horgan, Evaluating the effects of space weathering on magnetite on airless planetary bodies, Icarus, Volume 402, 2023, 115634, ISSN 0019-1035, https://doi.org/10.1016/j.icarus.2023.115634
- Whitney DL, Delph JR, Thomson SN, Beck SL, Brocard GY, Cosca MA, Darin MH, Kaymakci N, Meijers MJM, Okay AI, Rojay R, Teyssier C, Umhoefer PJ (2023) "Breaking plates: Creation of the East Anatolian fault, the Anatolian plate, and a tectonic escape system" *Geology*, doi:10.1130/G51211.1
- J. I. Simon, K. Hickman-Lewis, B. A. Cohen, L.E. Mayhew, D.L. Shuster, V. Debaille, E. M. Hausrath, B.P. Weiss, T. Bosak, M.-P. Zorzano, H. E. F. Amundsen, L.W. Beegle, J.F. Bell III, K. C. Benison, E. L. Berger, O. Beyssac, A.J. Brown, F. Calef, T. M. Casademont, B. Clark, E. Clavé, L. Crumpler, A. D. Czaja, A. G. Fairén, K. A. Farley, D. T. Flannery, T. Fornaro, O. Forni, F. Gómez, Y. Goreva, A. Gorin, K. P. Hand, S.-E. Harmran, J. Henneke, C. D. K. Herd, B. H. N. Horgan, J. R. Johnson, J. Joseph, R. E. Kronyak, J. M. Madariage, J. N. Maki, L. Mandon, F. M. McCubbin, S. M. McLennan, R. C. Moeller, C. E. Newman, J. I. Núñez, A. C. Pascuzzo, D. A. Pedersen, G. Poggiali, P. Pinet, C. Quantin-Nataf, M. Rice, J. W. Rice Jr., C. Royer^P, M. Schmidt, M. Sephton, S. Sharma, S. Siljeström, K. M. Stack, A. Steele, V. Z. Sun, A. Udry, S. VanBomme, M. Wadhwa, R. C. Wiens, A. J. Williams, K. H. Williford (2023) Samples Collected from

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- the Floor of Jezero Crater with the Mars 2020 Perseverance Rover. *J. Geophys. Res. Planets*, 128, https://doi.org/10.1029/2022JE007474.
- E. Clavé, K. Benzerara, P.-Y. Meslin, O. Forni, C. Royer^P, L. Mandon, P. Beck, C. Quantin-Nataf, O. Beyssac, A. Cousin, B. Bousquet, R. C. Wiens, S. Maurice, E. Dehouck, S. Schröder, O. Gasnault, N. Mangold, G. Dromart, T. Bosak, S. Bernard, A. Udry, R.B. Anderson, G. Arana, A.J. Brown, K. Castro, S.M. Clegg, E. Cloutis, A.G. Fairén, D.T. Flannery, P.J. Gasda, J.R. Johnson, J. Lasue, G. Lopez-Reyes, J.M. Madariaga, J.A. Manrique, S. Le Mouélic, J.I. Núñez, A.M. Ollila, P. Pilleri, C. Pilorget, P. Pinet, F. Poulet, M. Veneranda, Z.U. Wolf, and the SuperCam team (2023) Carbonate Detection with SuperCam in Igneous Rocks on the floor of Jezero Crater, Mars. J. Geophys. Res. Planets, 128, https://doi.org/10.1029/2022JE007463.
- Baptiste Chide, Xavier Jacob, Andi Petculescu, Ralph D.
 Lorenz, Sylvestre Maurice, Fabian See, Susanne Schröder,
 Roger C. Wiens, Martin Gillier, Naomi Murdoch, Nina L.
 Lanza, Tanguy Bertrand, Paolo Pilleri, David Mimoun,
 Manuel de la Torre Juarez, Ricardo Hueso, Asier Munguira,
 Agustin Sánchez-Lavega, German Martinez, Carène
 Larmat, Jérémie Lasue, Claire Newman, Jorge Pla-Garcia,
 Pernelle Bernardi, Ari-Matti Harri, Maria Genzer, Alain
 Lepinette (2023) Measurements of sound propagation in
 Mars' lower atmosphere. Earth Planet. Sci. Lett., 615,
 https://doi.org/10.1016/j.epsl.2023.118200.

OUTREACH NEWS

Check out the latest Superheroes of Science podcast with Dr. Marissa Tremblay of Purdue EAPS!

Listen or watch here:

YouTube | Apple



K-12 Outreach would like to ask for your help in getting this request out to professional organizations.

Teachers are desperately requesting resources related to STEM careers. Please consider sharing what you do with students and teachers by making a recording.

Calling all STEM Professionals! Join our mission to inspire students and support educators! Students lack awareness of the vast possibilities in STEM fields. Teachers are tasked with integrating college and career readiness into their curricula. To support both students and their teachers, Purdue University College of Science K-12 Outreach is creating an extensive STEM Career Repository. We need YOUR expertise to make a difference! Record a short video

(2-3 minutes) introducing the captivating work you do as a STEM professional. Help us shed light on potential careers in STEM and ignite young minds with passion and curiosity!

For the video, consider introducing yourself along with your job/career, then follow with important background information relevant to your job. Finish with something interesting that you do as part of your job.

Video clips (2-3 minutes) should be filmed horizontally and submitted to mrsmith@purdue.edu. If you would prefer, we can record you on Zoom. Many people are recording in both English and another language that they are fluent in speaking. If you do record in a second language, please let us know the language. Please share this request with your fellow professionals in the STEM fields to amplify our impact! Together, we can shape the future of STEM exploration and education. Let's inspire the next generation of scientists, engineers, and innovators! Connect with us and contribute to the STEM Career Repository:

https://www.purdue.edu/science/K12/LabPages/careers.php

If you or your group has worked with or helped with an activity for K-12 students or teachers, please fill out the departmental outreach activity form.

https://bit.ly/EAPSOut

Social sites:

<u>Twitter</u> <u>Instagram</u>

<u>Facebook Superheroes of Science</u>

EAPS departmental outreach web page

SUPERHEROES OF SCIENCE

Please help us by subscribing and sharing our podcast and our YouTube channel!

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On Spotify: https://bit.ly/SOS spotify

On Amazon: https://bit.ly/Superheroes amazon

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MEETINGS/EXPOS/ OPPORTUNITIES OUTSIDE OF PURDUE

NOMINATE A COLLEAGUE FOR INCLUSIVE GEOSCIENCE AWARD!

Do you know someone who is making a difference towards a more accessible and inclusive geoscience discipline for people with disabilities? Nominate them for the IAGD Inclusive Geoscience Education and Research (IGER) Awards! This award supports the vision of the IAGD to fundamentally shift the culture of the geosciences by creating a limate of access and inclusion, and fostering interest and engagement in geoscience academic and career pathways for people with disabilities. These awards are open to Earth science students, faculty and staff at all levels of academia (K-12 through university), as well as geoscience professionals outside of academia, who exemplify what it means to live and work inclusively in the classroom, lab, field or workplace. The IAGD will recognize one or two IGER Award winners each year selected from the entire pool of nominees. Nominations for the 2023 award are due August **20th.** Requirements and a link to the application can be found on the IGER page of the IAGD website: https://theiagd.org/iger/

7TH MIDWEST STUDENT CONFERENCE ON ATMOSPHERIC RESEARCH September 30-October 1, 2023

Showcase your research at the 7th Midwest Student Conference on Atmospheric Research (MSCAR)! MSCAR is a 2-day conference with student talks and poster sessions, guest speaker seminars, workshops and more, and we welcome all undergraduate and graduate students to join us and learn about Atmospheric Sciences. It will be hosted on September 30 - October 1, 2023 at the University of Illinois Urbana-Champaign, in-person with a hybrid component. Abstract submissions open on August 1st. A hotel block is available! Save the date and follow us on Twitter (@MSCAR_Illinois) to learn the most updated news about the conference!

FREE COURSE PROVIDED BY THE ASSOCIATION FOR WOMEN GEOSCIENTISTS

American Geosciences Institute, in partnership with the AAPG Foundation is offering AGI Member Societies FREE access to the Geologize online course, "Practical Geocommunication." This course, valued at \$400 per person, provides an excellent opportunity for geoscientists to become more effective and powerful public ambassadors for our field, something that is urgently needed. Given the challenges facing both our field and society more broadly, it has peraps never been more vital to effectively communicate geoscience to the public and other stakeholders. The free offer is available for one year, so you are encouraged to take advantage soon!

How to get free access to the training:

- Go to the AGI <u>society landing page here</u>.
- Click on the 'AGI Access' button
- Register for the course (free)
- Click on the link 'Have a Coupon?"
- Enter the code 'awg-agi-pggz-2324' to remove the price.

SCHOLARSHIPS AVAILABLE -AWG BRUNTON AWARD AND BRUNTON FIELD PROJECT AWARD

The AWG Brunton Award and Brunton Field Project Award promote the future of field mapping and data acquisition for the upcoming generation of people whose gender identity has been historically underrepresented in the geosciences. Applicants should have a passion for and exceptional experience with field work, including internships, field camp, coursework with a field-based research component, or research. The AWG Brunton Award has been active for >20 vears and provides Brunton compasses to 1-2 awardees each year. The AWG Brunton Field Project Award started in 2022 and awards a Brunton compass and up to \$1000 to support field activities to each of 1-2 awardees each year. Learn more here. Deadline for entry is Dec. 15th of each year.

14TH PLANETARY CRATER CONSORTIUM MEETING

August 9-11, 2023 Flagstaff, AZ / virtual Meeting info

86TH ANNUAL MEETING OF THE METEORITICAL SOCIETY

August 13-18, 2023 Los Angeles, CA Meeting info

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LUNAR SURFACE SCIENCE WORKSHOP

August 16-17, 2023 Virtual

Meeting info

ANNUAL MEETING OF THE LUNAR EXPLORATION ANALYSIS GROUP

September 20-23, 2023 Laurel, MD / virtual Meeting info

MARS EXPLORATION PROGRAM ANALYSIS GROUP

September 20 Virtual

Meeting info

VENUS EXPLORATION ANALYSIS GROUP

October 30-31, 2023 Albuquerque, NM / Virtual Meeting info

VENUS AS A SYSTEM

November 1-3, 2023 Albuquerque, NM / Virtual Meeting info

2nd INTERNATIONAL ORBITAL DEBRIS CONFERENCE

December 4-7, 2023 Houston, TX / virtual Meeting info

PLANET CHARACTERIZATION IN THE SOLAR SYSTEM

AND THE GALAXY WORKSHOP
February 21-23, 2024
Houston, TX / virtual
Meeting info

POSITIONS AVAILABLE-CAREER OPPORTUNITIES

DATA ASSIMILATION SCIENTIFIC PROGRAMMER

CIRES/NOAA GSL has a job opening for a Data Assimilation Scientific Programmer. The Scientific Programmer will use and advance the JEDI software for RTMA and RRFS applications. In particular, work toward continuous assimilation approaches, analysis uncertainty estimation, and analysis of complex physical diagnostics will be

prioritized. The development will take place in both NOAA High-Performance Computing environments and cloud computing environments. The candidate will have the opportunity to contribute to experimental and future operational RTMA prototypes including real-time experiments and the evaluation of RTMA by developers and interested parties. The candidate will work collaboratively with the GSL and EMC development teams, as well as the larger RRFS and UFS modeling community. Apply here

NYS MESONET FIELD TECHNICIANS

NYS Mesonet is hiring two field technician positions to maintain and repair 126-site standard network and 85 subnetwork sites. Competitive pay + benefits, learn more and apply here.

MONTANA MESONET FIELD MANAGER, MONTANA CLIMATE OFFICE

The Montana Climate Office within the W.A. Franke College of Forestry and Conservation and at the University of Montana is seeking applications for an Applied Meteorologist/Mesonet Field Manager position. The Mesonet Field Manager (MFM) will oversee the installation and maintenance of climate monitoring stations (Montana Mesonet) across the state. The MFM will lead three Mesonet field crews: three full-time technicians and six seasonal employees in the construction and maintenance of the Montana Mesonet and ensure high-quality performance and operation of all stations. The Montana Mesonet is being developed through a US Army Corps of Engineers (USACE) award to the Montana Climate Office. Link

<u>TEACHER OF PLANETARY ATMOSPHERES – ISAE-SUPAERO IN TOULOUSE</u>

The teacher-researcher selected will be attached to the DEOS department of ISAE-SUPAERO. She or he will contribute to the development and animation of research around their own themes. She or he will ensure the fundamental missions of a teacher in his field of competence (face to face teaching, management of teaching programs). She or he will also be responsible for maintaining and developing relations and cooperation with regional, national and international academic and industrial partners. Link

MULTIPLE POSITIONS OPEN WITH ENVIROPORENSICS

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EnviroForensics is hiring! We're looking for motivated and collaborative individuals to join us as a Project Manager (Indianapolis or Louisville), Staff Professional (Indianapolis), Field Professional (Indianapolis), and Field Technician (Indianapolis). If you're interested in joining our team, visit our Careers and apply today! Click here to apply

ASSISTANT PROFESSOR OF ENVIRONMENTAL & GEOSPATIAL SCIENCES - WESTERN KENTUCKY UNIVERSITY

The Department of Earth, Environmental, & Atmospheric Sciences (EEAS) at Western Kentucky University is seeking highly qualified applicants for a 9-month tenure-track Assistant Professor of Environmental & Geospatial Sciences position beginning August 2023. Learn more here.

INDIANA EHS ADVISOR JOB POSTING

U.S. Compliance: Searching for high performing EHS professionals who want to make a difference. Join our fast-growing EHS compliance firm to help us care for people, Protect the environment and grow our clients' business. Link to posting.

METEOROLOGIST POSITIONS AVAILABLE TEGNA

Multiple <u>meteorology positions</u> are open with TEGNA.

BRYAN ENVIRONMENTAL CONSULTANTS

Homewood, IL

SEEKING PART-TIME TO FULL-TIME POSITIONS

- Bachelor's or Master's degree in environmental engineering, civil engineering, geotechnical engineering, geology
- Knowledge of State and Federal environmental regulations a plus
- Experience with Phase I and II Environmental Site assessments a plus
- Strong writing skills
- Proficient in all Microsoft Office applications
- Must have cell phone and computer (laptop)
- Valid Driver's License

POST-DOC OPPORTUNITY - AIR FORCE SCIENCE & TECHNOLOGY FELLOWSHIPS

The National Academies of Sciences, Engineering, and Medicine administers postdoctoral and senior research awards at the U.S. Air Force Research Laboratory (AFRL), the U.S. Air Force Institute of

Technology (AFIT), and the U.S. Air Force Academy (USAFA) under the <u>Air Force Science & Technology</u> Fellowship Program (AF STFP).

Seeking highly qualified candidates who are U.S. citizens and hold, or anticipate earning, a doctorate in a variety of fields of science or engineering.

Application deadline dates (four annual review cycles): February 1, May 1, August 1, November 1 Awardees have the opportunity to:

- Conduct independent research in an area compatible with the interests of the Air Force laboratories
- Devote full-time effort to research and publication
- Access the excellent and often unique Air Force research facilities
- Collaborate with leading scientists and engineers
- Awardee benefits:
- Base stipend starting at \$76,542; may be higher based on experience
- Health insurance (including dental/vision), relocation benefits, and a professional travel allowance

Applicants should contact prospective AFRL, AFIT and USAFA Research Adviser(s) at the lab(s) prior to the application deadline to discuss their research interests and funding opportunities.

For detailed program information, to search for AFRL, AFIT, and USAFA Research Opportunities, and to contact prospective Research Adviser(s), visit www.nas.edu/afstfp.

PURDUE ENVISION CENTER (UNDER ITAP) RECRUITING EAPS STUDENTS

At the Envision Center looking to recruit EAPS students with background and interest in weather visualization. Details on the job opening can be found here.

POSITIONS AVAILABLE IN METEOROLOGY AND ATMOSPHERIC SCIENCE

View current career listings

AGI GEOSCIENCE JOB CENTER

Check listings here.

GRADIENT CORP

MULTIPLE OPPORTUNITIES

Please feel free to contact <u>Qian Zhang</u> if you are interested in applying and/or have any questions about the company and the opportunities.

NATIONAL WEATHER SERVICE

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POSITIONS AVAILABLE

<u>Check here for available positions</u> with the National Weather Service.

NEWSLETTER INFO

IMPORTANT NOTICE ABOUT THIS NEWSLETTER

This newsletter is used as the primary information source for current and upcoming events, announcements, awards, grant opportunities, and other happenings in our department and around campus. Active links to additional information will be provided as needed. Material for inclusion in the newsletter should be submitted to Cheryl Pierce by 5:00pm on Thursday of each week for inclusion in the Monday issue.

For answers to common technology questions and the latest updates from the EAPS Technology Support staff, <u>click here</u>. As an additional resource for information about departmental events, seminars, etc., see our <u>departmental calendar</u>.

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