

Department of Earth, Atmospheric, and Planetary Sciences

EAPS WEEKLY NEWSLETTER

April 10, 2023

Facebook Twitter LinkedIn Instagram Website

EAPS MEETINGS & EVENTS

PURDUE CALENDAR 2023

EAPS K-12 OUTREACH CALENDAR OF EVENTS

REPORT YOUR OUTREACH AND ENGAGEMENT ACTIVITIES

PUBLICATIONS

 Wang, W., Schmitt, D. R., & Chan, J. (2023). Heterogeneity versus anisotropy and the state of stress in stable cratons: Observations from a deep borehole in Northeastern Alberta, Canada. *Journal of Geophysical Research: Solid Earth*, 128,e2022JB025287. <u>https://doi.org/10.1029/2022J</u> <u>B025287</u>

NEWS/OPPORTUNITIES AT PURDUE

DEFENSE: ALLISON LAFLEUR MONDAY, APRIL 10

Dissertation titled: "ZDR Arc Area and Intensity as a Precursor to Low Level Rotation in Supercells."

Departmental seminar:

10 April at 12:00 p.m. in HAMP 3201 Zoom link Ph.D. defense:

11 April at 10:00 a.m. in HAMP 2201 Zoom link

SPEAKER KIMBERLY BOTT MONDAY, APRIL 10

Kimberly Bott is from University of California, Riverside HAMP 2201 10:30 am – 11:30 am EAPS COLLOQUIA - BRAD JOLIFF THURSDAY, APRIL 13 Brad Joliff is from Washington University in St. Louis Host: Michelle Thompson Hamp 1252 3:30 – 4:30pm

WANT TO GET A TASTE OF MARS? APPLY TO PERFORM RESEARCH IN ANALOG

ASTRONAUT MISSIONS AT THE MDRS



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 <u>here</u>. **Spring Application Deadline:** March 1 **Fall Application Deadline:** October 1

STEM TEACHER RESIDENCY PROGRAM BECOME A STEM TEACHER IN 18-MONTHS

Purdue's Indianapolis STEM Teacher Residency program, in partnership with Indianapolis Public Schools, aims to strengthen the educational outcomes of students in one of the largest urban school districts in Indiana. We will prepare you to become a culturally competent, highly qualified teacher who will elevate student achievement in

middle and high school science, technology, engineering, and mathematics (STEM). After successfully completing the program, graduates must commit to a three-year STEM-related teaching position with Indianapolis Public Schools.

GET PAID TO CONTINUE YOUR EDUCATION

- Stipend: \$46,500
- Program Cost: (\$16,875)
- Remaining Stipend for Living Expenses: \$29,625

100% ONLINE COURSEWORK AND

- IN-PERSON STUDENT TEACHING
 - Master of Science in Secondary STEM Education
 - Graduate Certificate in K-12 Integrated STEM
 - Education
 - Initial Teaching Licensure

Learn more.

EAPS GRAD STUDENT RESEARCH OPPORTUNITIES

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

OUTREACH NEWS

Anyone working with minors on campus is required to go through the Required Reporting training. It should only take 10-15 minutes to complete the training.

- **Step 1**: Log into the Protection of Minors Portal (<u>https://apps.ideal-</u> logic.com/purdue) with boiler key.
- Step 2: If you use different email accounts, you may enter them on the first screen under email addresses. This allows all of your emails to be under the one account.
- Step 3: If you're volunteering, you only need to do the "Required Reporting" training. This should only take about 10 minutes to go through the training and take the short quiz.

Once you have completed the quiz you are all done and compliant for the next 24 months :) If you have not completed this training, you may not volunteer or work with any minors on campus as part of University events. It only takes 10-15 minutes to be compliant, and that will allow you to volunteer for any programs that involve minors. Upcoming Outreach Events:

April

- April 25, HoPs lab: AP Chem Buffers Lab (high school)
- April 27, HoPs lab: AP Chem Buffers Lab (high school)

May

- May 02, HoPs lab: Atmospheric Lab Introduction to Air Pollution (*high school*)
- May 10, HoPs lab: Intro to paleontology and past environments (2nd Grade)
- May 11, HoPs lab: Atmospheric Lab Introduction to Air Pollution (*high school*)
- May 16, HoPs lab: Atmospheric Lab Introduction to Air Pollution (*high school*)

June

- June 12-13, Teacher Professional Development: Preparing for the Solar Eclipse in the Middle School Classroom
- June 15-16, Teacher Professional Development: Preparing for the Solar Eclipse in the Elementary Classroom
- June 27, Virtual Teacher PD: Preparing for the Solar Eclipse in the Middle School Classroom

July

• July 13-14, Grandparents University: Understanding the Atmosphere (*Middle school aged students with their grandparents*)

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> <u>EAPS departmental outreach web page</u>

SUPERHEROES OF SCIENCE

Please help us by subscribing and sharing our podcast and our <u>YouTube</u> channel!

On Apple: <u>https://bit.ly/SOS_apple</u> On Spotify: <u>https://bit.ly/SOS_spotify</u> On Amazon: <u>https://bit.ly/Superheroes_amazon</u>

MEETINGS/EXPOS/ OPPORTUNITIES OUTSIDE OF PURDUE

FREE COURSE PROVIDED BY THE ASSOCIATION FOR WOMEN GEOSCIENTISTS

Starting March 1, 2023 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 society landing page here.
- 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.

<u>NAGT – 9™ ANNUAL</u> EARTH EDUCATORS' RENDEZVOUS

The National Association of Geoscience Teachers (NAGT) is excited to announce that registration and abstract submissions are now open for the <u>ninth</u> <u>annual Earth Educators' Rendezvous</u>, **taking place in Pasadena**, **California**, from July 10-14, 2023! registration, programming, and <u>contributed</u> program abstract submissions.

Register

Make sure you save your spot by <u>registering!</u> Register by the early registration deadline--Wednesday, May 3--for the best rates. NAGT members receive \$100 off registration.

Learn more

Check out the <u>Rendezvous website</u> and <u>participant</u> <u>information</u> for more details.

<u>REU OPPORTUNITIES –</u> 2023 COMMUNITY SOURCED DIRECTORY

We have launched the 2023 COMMUNITY SOURCED DIRECTORY of Research Experiences for Undergraduate - REU! This is to support students in finding powerful and well-supported Research Experiences. Furthermore - the directory includes many aspects of accessibility and identity that can help all our students. **A new column this year is if a program has opportunities for non-US Citizens**.

You can access v04 for Summer 2023 posted here.

Subsequent versions will be posted ~weekly into March. While a majority of these are NSF funded, a growing number are funded by a wide range of organizations/institutions, and have a growing range of formats.

We recommend that users review the column headers (listed below), in order to help them find programs that fit their identities and needs, and that they can reach based on their exams / university calendars. A student in a quarter program should avoid programs that start in early May, and vice versa for students in semester programs who need to be in class in late August/September.

PROGRAM CHARACTERISTICS

- ACCOMMODATION provided
- TRAVEL costs provided/reimbursed
- FOOD provided
- Overnight OFF-SITE travel required
- INTERNATIONAL requires passport
- OUTDOOR field work
- Working on/in WATER know how to swim
- DRIVING license required
- COVID VACCINATION required

OTHER

- STUDENT CHARACTERISTICS
 - Rising SOPHOMORES
 - Rising JUNIORS
 - Rising SENIORS
 - 2-YEAR Coll. Students
 - 4-YEAR Coll. Students WITHOUT grad program
 - 4-YEAR coll. students WITH grad program
 - Post Baccalaureate (with degree / already graduated)
 - PRIOR Research Experience
 - NO prior research experience
 - TEACHERS or other professionals
 - VETERANS
 - MINORS (<18)
 - NON US CITIZENS (opportunities available)
 - OTHER

ACCESSIBILITY

- Encouraged Applicant Identities
- Have not made accessibility plan
- YES, accessible to DEAF / ASL
- MOBILITY-AID/ WHEELCHAIR
- Yes GUIDE DOGS SERVICE ANIMALS
- Accommodate FOOD RESTRICTIONS

OTHER SUPPORT

- Stipend
- Describe additional supports provided by the program, which may include support for conferences attendance, early admission pathway to graduate program, support with research transition to senior thesis work, support for publication fees, etc.
- Describe the plan for the REU should COVID restrictions limit in-person/on-site activities.

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 years 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.

EXTRATERRESTRIAL MATERIALS ANALYSIS GROUP (EXMAG) POSTPONED August 1-3, 2023

Virtual Meeting info

OUTER PLANETS ASSESSMENT GROUP (OPAG)

May 2-3, 2023 Johns Hopkins University Applied Physics Laboratory Laurel, MD/Virtual Meeting info

> <u>4TH INTERNATIONAL PLANETARY CAVES</u> <u>CONFERENCE</u> May 4-7, 2023 Haria Municipality, Lanzarote, Spain <u>Meeting info</u>

BRINES ACROSS THE SOLAR SYSTEM: ANCIENT AND FUTURE BRINES CONFERENCE May 15-18, 2023 Reno, NV Meeting info

ASTEROIDS, COMETS, & METEORS CONFERENCE June 18-23, 2023 Flagstaff, AZ

Meeting info

<u>6TH PLANETARY DATA WORKSHOP</u> June 26-28, 2023 Flagstaff, AZ Meeting info URANUS FLAGSHIP: INVESTIGATIONS AND inSTRUMENTS FOR CROSS-DISCIPLINE SCIENCE July 25-27, 2023 Pasadena, CA Meeting info

86TH ANNUAL MEETING OF THE METEORITICAL SOCIETY August 13-18, 2023 Los Angeles, CA Meeting info

2nd INTERNATIONAL ORBITAL DEBRIS CONFERENCE December 4-7, 2023 Houston, TX / virtual <u>Meeting info</u>

PLANET CHARACTERIZATION IN THE SOLAR SYSTEM AND THE GALAXY WORKSHOP February 21-23, 2024 Houston, TX / virtual <u>Meeting info</u>

POSITIONS AVAILABLE-CAREER OPPORTUNITIES

NYS MESONET FIELD TECHNICIANS

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

AGU INTERN, SCIENCE WRITER (FULLY REMOTE)

WHAT YOU WILL DO

- Work with the media relations team to identify and pitch newsworthy stories about new research published in AGU's peer-reviewed journals.
- Interview researchers about their work and write news-style press releases and research spotlights under deadline.
- Craft headlines and brief descriptions of new research for AGU's weekly highlights newsletter.
- Meet daily with media relations staff, prepare materials as requested and respond to editing.
- Use and explore social media and multimedia to promote scientific research.

WHAT YOU WILL BRING

• A bachelor's degree or higher in journalism, communications or Earth and space science.

- Coursework or equivalent experience in news-style writing about science for a lay audience.
- Familiarity with AP style.
- Experience managing multiple projects or assignments on deadline.
- Professional attitude and interpersonal skills.
- Proficiency with Microsoft Office Suite (Word, PowerPoint, Excel), internet browsers, and web search engines.
- Experience with social media preferred.

HIRING SPECIFICS

- To Apply: Please submit RESUME along with 3 writing samples
- Pay \$16.50 per hour
- Full Time/ Non-Exempt, 3 month Summer 2023 Internship, remote in the US.
- AGU will make reasonable accommodations in compliance with the Americans with Disabilities Act of 1990.
- Work Authorization: We will not sponsor applicants for work visas in the US.
- AGU is an Equal Opportunity/Affirmative Action employer. Minorities, women, veterans and individuals with disabilities are encouraged to apply.

<u>Link</u>

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

TEACHER OF PLANETARY ATMOSPHERES – ISAE-SUPAERO IN TOULOUSE

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

TENURE HIRE IN ATMOSPHERIC OR EARTH SCIENCE -IU BLOOMINGTON

The Indiana University Bloomington Department of Earth & Atmospheric Sciences invites applications for a tenure hire in Atmospheric or Earth Science with applications to planetary science, to begin in Fall 2023. Candidates should have research interests in planetary atmospheric modeling or some aspect of planetary geology and have links to one or more of our research strengths in atmospheric sciences, geophysics, surface processes, sedimentology, hydrology, crustal processes, isotopic analysis, paleoclimate, or biogeochemistry. This hire is intended to be at the Associate or Full Professor level, but outstanding applicants at the Assistant Professor level with a strong record of publication and external funding will also be considered. Link

MULTIPLE POSITIONS OPEN WITH ENVIROFORENSICS

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! <u>Click here to apply</u>

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> <u>Fellowship Program (AF STFP).</u>

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 <u>here</u>.

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>Qianlai Zhang</u> if you are interested in applying and/or have any questions about the company and the opportunities.

NATIONAL WEATHER SERVICE 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 <u>Cheryl Pierce</u> by 5:00pm on Thursday of each week for inclusion in the

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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>.