

EAPS WEEKLY NEWSLETTER

September 9, 2024

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EAPS MEETINGS & EVENTS

[PURDUE REGISTRAR CALENDARS](#)

[EAPS SEMINARS AND EVENTS CALENDAR](#)

[EAPS K-12 OUTREACH CALENDAR OF EVENTS](#)

[REPORT YOUR OUTREACH AND ENGAGEMENT ACTIVITIES](#)

CONGRATS, KUDOS, COOL STUFF, AND THUMBS UP!

- Congrats to the 2024 Research Blitz faves! Rachel Miller (Graduate Student) – “Pluton Emplacement and Negative Feedback on Volcanic Lifespan of Spirit Lake Pluton, Washington” and Briony Horgan (Professor) – “Please, just send a robot.” Also, shoutout to the runners up: tudent (tied)
 - Kaustub P Anand – “Rings around Centaurs from regolith capture”
 - Michael McPherson – “Is space trash forming ice condensation nuclei?”
 - Faculty - Ben Pearce – “The Laboratory for Origins and Astrobiology Research”
- Congratulations to Matthew Huber for being appointed to the NOAA Science Advisory Board Climate Working Group!

NEWS/OPPORTUNITIES AT PURDUE

EAPS SEMINAR – CHRISTINA PATRICOLA

Thursday, Sept. 12th, 3:30 pm, HAMP 1252
Christina Patricola is an associate professor at Iowa State. Host: Grad Student Jose A. Ocegueda Sanchez

PURDUE GIS DAY 2024

Purdue Libraries and School of Information Studies invites you to attend and present at Purdue GIS Day 2024: Exploring GeoAI on **Thursday, November 7, 2024** in STEW 214.

Take your research to the next level by presenting it to leading scholars and members of the broader GIS community. Undergraduate and graduate students can submit proposals for a poster presentation and/or a 5-minute lightning talk on any GIS-related topic. This is a great opportunity to practice public speaking and add noteworthy skills to your resume. The best of the student posters and presentations will receive cash awards.

The conference will also feature keynote speaker Gregory Brunner, an experienced scientist, award-winning professor, and principal data scientist at Esri—global market leader in GIS software, location intelligence, and mapping. He will be speaking about the rapid growth of the AI model ecosystem and the potential impact it has and will have on GIS in his talk titled, “The Burgeoning AI Model Ecosystem and Its Potential Impact on GIS.”

Please submit your proposal by September 30, 2024 which will also get you registered for the conference to receive a free T-shirt and to attend the panel discussion lunch. [Submit proposals and register for the event](#)



DEFENSE CIVILIAN TRAINING CORPS - PURDUE UNIVERSITY

Purdue's Defense Civilian Training Corps (DCTC) is a new program that will build civilian careers in the Department of Defense relating to acquisition, digital technologies, critical technologies, science, engineering, and finance and more. The Defense Civilian Training Corps is a scholarship-for-civilian-service award.

EAPS GRAD STUDENT RESEARCH OPPORTUNITIES

If you are interested in an EAPS grad research opportunity, [click here](#) for more information.

OUTREACH NEWS



If you have not done your STEM Career video yet ([like the one above](#)), please set up a time with

Steven to record it. It should only take you ~10 minutes to record the video.

[Here is a great example from Jonathan Delph](#)
Link to the repository with all of the recorded STEM Career videos: <https://purdue.link/STEMrepository>

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](#).

Social sites:

[Twitter](#)

[Instagram](#)

[Facebook Superheroes of Science](#)

[EAPS departmental outreach web page](#)

SUPERHEROES OF SCIENCE

Please help us by subscribing and sharing our podcast and our [YouTube](#) channel!

On Apple: https://bit.ly/SOS_apple

On Spotify: https://bit.ly/SOS_spotify

On Amazon: https://bit.ly/Superheroes_amazon

Upcoming Outreach Events:

Purdue Homecoming

- Date: Saturday 9/28
- Location: Outside of HAMP building in the College of Science tent
- Time: Morning before game
- Needs:
 - volunteers to run stations
 - Steven will NOT be available this day. So, groups/persons will need to get the materials for activities prior to the day.

Wonders on the Wabash

- Dates:
 - Tuesday, September 24
 - Wednesday, September 25
 - Thursday, September 26
 - Tuesday, October 01
 - Wednesday, October 02
- Location West Lafayette
- Time: This varies depending on what you sign up for.
- Needs
 - All-day raft instructor - You and another adult will be in a raft with approximately 6 to 8 - 6th grade students.
 - AM set-up at Davis Ferry - North 9th Street - 6:30 AM - Early morning set-up is getting rafts and equipment ready for the day.
 - Tapawingo Park - PM where needed - 12:30 PM - Help get lunch set-up and post trip equipment.
 - All-day on land where needed - 9:00 AM - General help

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- More information: <https://www.tippecanoe.in.gov/969/Volunteer-Information>
- Sign up for this early as they have to do a background check on all volunteers

Planetary Fact of the Week (Universal Facts!)

- Dates: Wednesday, September 11th & Ongoing
- Location: HAMP 2201
- Time: During Crater Cafe 10:30 am (or schedule another day/time with Steven)
- Needs: We are recording fun facts about the universe. These videos need to be under 1 minute so make it a quick fact, not a story!

Rock of the Week

- Dates: Ongoing
- Location: HAMP 2270 (Superheroes of Science HQ)
- Time: During GaGgle 10:30 am (or schedule another day/time with Steven)
- Needs: We are recording fun facts about rocks, minerals, or fossils. These videos need to be under 1 minute so make it a quick fact, not a story! Bring your favorite rock or send Steven a photo of one that you are going to talk about!

Tabletop Gaming Night

- Dates: First Friday of each Month (September - May): 6-9 pm
- Location: HAMP 2244
- Needs: No "needs" here. It's not even an official Dept event. It's just a bunch of us getting together to play board games. Everyone is welcome.

PUBLICATIONS

- **Hamill, C. D., A. V. Johnson,** and P. Gao (2014): Light Scattering Measurements of KCl Particles as an Exoplanet Cloud Analog. *The Planetary Science Journal*, 5 186. DOI 10.3847/PSJ/ad6569
- **McGlasson, R.A., M.M. Sori, A.M. Bramson,** D.E. Lalich (2024) radar sounding reveals common evolutionary history between the north polar layered deposits and outlier ice deposits on mars. *Geophysical Research Letters*, 51, 16, doi:10.1029/2024gl109057.
- **Kupres, C. A., Yang, X.,** Haney, M., & Roman, D. C. (2024). Sustained co-eruptive increase in seismic velocity below Great Sitkin Volcano due to magma extrusion. *Geophysical Research Letters*, 51, e2024GL108991. <https://doi.org/10.1029/2024GL108991>
- Hinze, W.J., 2022, From Compass to Drone: The Evolving Role of Magnetics In Mapping the Geology and Ore Deposits Of the Lake Superior Region: 1830-2022, Minnesota Geological Survey Open File Report OFR-22-8, 129 p.

- Hinze, W.J., 2023, The Meter Reader: Early magnetic studies in the Lake Superior region. *The Leading Edge* 42 (8), 566–568. doi: <https://doi-org.ezproxy.lib.purdue.edu/10.1190/tle42080566.1>
- Hinze, W.J., 2023, The early history of magnetic exploration in North America. *Earth Science History* 42(2), 1-26.

MEETINGS/EXPOS/ OPPORTUNITIES OUTSIDE OF PURDUE

NATGEO REQUEST FOR PROPOSALS

The National Geographic Society (NGS) is pleased to announce a Request for Proposals (RFP) for academic researchers investigating topics related to geography education in Indiana. Awards of up to \$5,000 are available to support research related to geography education, including but not limited to: geographic thinking and learning, the [Explorer Mindset](#), environmental education, geographic information systems (GIS), and citizen science. Research may investigate geographic education from any discipline, or be interdisciplinary in nature, and may explore formal or informal learning environments. Research that illuminates barriers and/or advances access for those farthest from opportunity is encouraged.

Eligibility- Researchers from public and independent institutions of higher education in the state of Indiana are eligible to apply. Applicants from historically and currently underrepresented and underserved populations are encouraged to apply. The award can support a broad range of researcher audiences including all graduate students (including thesis or dissertation support), and faculty of all ranks.

Potential Research Outputs- Deliverables could include a range of research results including but not limited to white papers, empirical research, literature reviews, dissertations, and theses.

Restrictions-

- Funds must be used to strengthen geographic education in Indiana
- The award is intended for non-commercial research
- Institutional overhead/indirect costs not allowed

- Funds must be distributed by the end of 2024 and should be used in 2025

A final research product is required and preliminary research outputs should be produced by the end of the 2025 academic year. There may also be opportunities to present research to NGS staff.

Instructions for Submitting Application
Please complete [this application form](#) by **September 30, 2024**. Please contact Carley Lovorn, clovorn@ngs.org, if you have questions.

SCGSR GRADUATE STUDENT PROGRAM

The SCGSR 2024 Solicitation 2 (2024 S2) is now open for applications. You can see the solicitation at <https://science.osti.gov/wdts/scgsr/>. The online application can be accessed at <https://apps.ornl.gov/SCGSR/Account>. The online application will last for 12 weeks and will close on **November 6, 2024, at 5:00PM ET**. Three items for your attention: Please direct all questions to sc.scgsr@science.doe.gov.

UCAR STUDENT OPPORTUNITIES WEBSITE

Check the opportunities website for opportunities at UCAR.

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 [Air Force Science & Technology 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.



The 18th Annual Ecological Sciences and Engineering Symposium

Fowler Hall, Stewart Center October 2, 2024 at 6 pm

Dan Egan for many years covered the Great Lakes for the Milwaukee Journal Sentinel. Now he writes occasional long-form pieces about climate change for national media outlets, including the New York Times, and is a senior water policy fellow at the University of Wisconsin-Milwaukee's School of Freshwater Sciences. He is the author of *THE DEVIL'S ELEMENT: PHOSPHORUS AND A WORLD OUT OF BALANCE* and the New York Times best seller *THE DEATH AND LIFE OF THE GREAT LAKES*. Twice a finalist for the Pulitzer Prize, he has won the Alfred I. duPont-Columbia University Award, John B. Oakes Award, AAAS Kavli Science Journalism Award, and J. Anthony Lukas Work-in-Progress Award. A graduate of the Columbia Journalism School, he lives in Milwaukee with his wife and children.



Dan Egan

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CALL FOR POSTERS!

Open to all students and areas of research

Present your research at the Fall 2024 ESE Symposium and compete for exciting awards:

1st Place: \$300
2nd Place: \$150

Submit your abstract by **Sept. 15th** for a better chance to present!



SCAN ME!

October 3, 2024

Leopold's Landing, Pfendler Hall
2:30-4:30 p.m.



**AWG BRUNTON AWARD AND
BRUNTON FIELD PROJECT AWARD**

The AWG Brunton Award and Brunton 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.**

ASTROBIOLOGY AND THE FUTURE OF LIFE MEETING

October 16-18, 2024
Houston, Texas / Virtual
[Meeting info](#)

**ANNUAL MEETING OF THE LUNAR EXPLORATION
ANALYSIS GROUP (LEAG)**

October 28-30, 2024
Houston, Texas / Virtual
[Meeting info](#)

**MARS EXPLORATION PROGRAM ANALYSIS GROUP
(MEPAG)**

November 6-7, 2024
Virtual
[Meeting info](#)

OUTER PLANET ASSESSMENT GROUP (OPAG) MEETING

November 6-8, 2024
Virtual
[Meeting info](#)

VENUS EXPLORATION ANALYSIS GROUP (VEXAG)

November 17-19, 2024
Louisville, KY / Virtual
[Meeting info](#)

2024 AGU ANNUAL MEETING

December 9-13, 2024
Washington, DC
[Meeting info](#)

**ITOKAWA AND THE DAWN OF ASTEROIDAL
SAMPLE RETURN WORKSHOP**

January 28-30, 2025
Houston, Texas
[Meeting info](#)

56th LUNAR PLANETARY SCIENCE CONFERENCE

March 10-14, 2025
The Woodlands, Texas / Virtual
[Meeting info](#)

POSITIONS AVAILABLE- CAREER OPPORTUNITIES

- **[New Mexico 50yr Water Plan](#). We currently have 8 open positions to support this effort!**
 - [Junior Hydrogeologist](#) - Bachelor's degree in Earth Sciences required
 - [Senior Hydrogeologist](#) - Master's degree in Earth Sciences required
 - [Water Data Engineer/Developer](#) - Bachelor's degree in Computer Sciences required
 - [Database Developer/Administrator](#) - Associate's degree or 18+ months experience in computer sciences or related fields
 - [Geothermal Research Associate](#) - Master's degree in Geoscience/Geophysics/Engineering required
 - [Argon Lab Manager](#) - Master's degree in Argon geochronology
 - [Publications Resource Specialist](#) - high school diploma or GED required
- **[Tenure-track asst. professor](#) – Dept. of Marine, Earth, and Atmospheric Sciences (MEAS) at NC State University**
- **[Aviation Meteorology Assoc. Professor](#) - University of Oklahoma. Contact search chair Dr. Jens Redemann (jredemann@ou.edu)**
- **[Senior Instructional Professor](#) – UChicago**
- **[Tenure-track Meteorology Faculty Position](#) – Valparaiso University**
- **NYS Mesonet [Field Technicians](#)**
- **[Multiple Positions](#) with Enviroforensics**
- **PURDUE STUDENT OPPORTUNITY: Purdue Envision Center [recruiting EAPS students](#)**
- **Meteorology and Atmospheric Science – [multiple positions from various companies](#)**
- **AGI Geoscience Job Center – [multiple positions](#)**
- **Gradient Corp – [multiple opportunities](#). contact [Qian Zhang](#)**
- **National Weather Service – [multiple opportunities](#)**

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, [click here](#). As an additional resource for information about departmental events, seminars, etc., see our [departmental calendar](#).