EAPS MEETINGS & EVENTS

CoS SPRING FACULTY MEETING SCHEDULE
Apr. 19, 2016
LWSN 1142
3:30-4:30 PM

EAPS SPRING FACULTY MEETING SCHEDULE
Mar. 22nd, Apr. 12th, 2016
HAMP 3201
3:00-4:30 PM

COS RESEARCH AWARD LECTURES
Gabor Csathy – Physics and Astronomy
Zhao-Qing Luo – Biological Sciences
Dongyan Xu – Computer Science
Mar. 1
LWSN 1142
3:00-5:00 PM

~ ~ ~ ~ ~ ~
LPSC 2016
March 21-25, 2016
The Woodlands, Texas

~ ~ ~ ~ ~ ~
EAPS AWARDS BANQUET
April 18, 2016
Buchanan Club of Ross-Ade Pavilion
Reception: 5:30 PM
Dinner at 6:00 PM

~ ~ ~ ~ ~ ~
ALUMNI ADVISORY BOARD MEETING
April 19, 2016
HAMP 2201

~ ~ ~ ~ ~ ~
DEAN’S VISIT TO DEPARTMENT
April 21, 2016
1:30 - 4:00 PM

EAPS COLLOQUIA
Carol Ann Clayson, Woods Hole Oceanographic Institution
“The Role of the Ocean in the Global Climate”

Thursday, March 3, 2016
3:30 PM
HAMP 1252

Francisca E. DeMeo, Harvard-Smithsonian Center for Astrophysics
“Asteroids as Records of Solar System History”

Thursday, March 10, 2016
3:30 PM
HAMP 1252

EAPS NEWS

MEET THE VORTEX-SE FIELD TEAM

Pictured from left to right: Prof. Daniel Dawson, Prof. Robin Tanamachi, Douglas Miller, Jessica Bozell, Justin Buckingham, Logan Downing, Matthew Seedorf, Olivia Gerrity, and Prof. Michael Baldwin.

The team is preparing for a major tornado study project that begins on March 1. Learn more at http://www.eaps.purdue.edu/vortexse/.

~ ~ ~ ~ ~ ~
2016 COS FACULTY & STAFF AWARDS RECIPIENTS

The College of Science hosted the tenth annual Faculty and Staff Recognition Luncheon on Feb. 25, 2016. The event celebrates individuals whose ideas and efforts help maintain the College of Science as a world-recognized institution. It is
through the tireless and selfless work of these honorees the college remains special.

We would like to congratulate the recipients from EAPS and recognize all they do for the department.

Lucy Flesch – Leadership Award
Barbara Gibson – Engagement Award
Briony Horgan – Undergraduate Advising Award
Kathy Kincade – Customer Service Award
Wen-wen Tung – Diversity Award

~ ~ ~ ~ ~ ~

ATTENTION FACULTY AND STUDENTS: LAST DAY TO DROP A SPRING 2016 CLASS

The last day to drop a 16-week class for spring is Friday, March 11, 2016. This deadline occurs earlier than in previous years and is on the last day of classes before Purdue’s Spring Break (March 12-20). Most students will need the instructor’s signature if they wish to withdraw from a class.

UNDERGRADUATE AND GRADUATE STUDENT INFORMATION

UG RESEARCH DAY IN DISCOVERY PARK

Looking for an exciting interdisciplinary research experience for summer of fall 2016? Join us for the annual Undergraduate Research Day in Discovery Park to learn more about research opportunities available through formal and informal research programs. If you have questions contact Maria Longoria-Littleton at mlongori@purdue.edu

March 4
11:30 – 2:00 pm
MRGN 121

~ ~ ~ ~ ~ ~

SUMMER REGISTRATION RESEARCH HOURS CHANGE

There has been a change in the registration of Summer research hours (EAPS 69800 and EAPS 69900). Research credits will now cover all three modules instead of just the second and third. Summer session now begins May 16.

- It’s very important that all graduate students conducting research – on or off campus – be appropriately registered. The number of 69800 and 69900 credits taken during the summer should reflect a graduate student’s research and writing efforts.
- EAPS 69800 and 69900 are scheduled from May 16 through August 2.
- A maximum of nine (9) credits taken during Summer Session are permitted to fulfill graduation requirements.
- Graduate staff must be registered for at least three (3) credits in order to hold their assistantships (i.e., if you are being paid, you must be registered).

As during the Fall/Spring semesters, a Form 23 is required in order to register for research hours. Failure to register by May 16 will invoke a $200 late registration fee. If you have questions contact Kathy Kincade at kkincade@purdue.edu

~ ~ ~ ~ ~ ~

MICROSOFT WORD FOR THESIS WRITERS

These courses in March provide an overview of MS Word features that will help you quickly and easily format a thesis or dissertation meeting Purdue Graduate School requirements. Contact Ashlee Messersmith at amiley@purdue.edu with questions. See attached flyer dates and times. Registration is required at: https://goo.gl/X51TEQ

~ ~ ~ ~ ~ ~

2016 CSU SACRAMENTO- GEOLOGY FIELD CAMP

Spring 2016 field course open to senior geology majors. Note that the entire class is conducted from June 1 to July 10, 2016.

Applications form is available at www.csus.edu/geology. Email application PDF and materials to geology@csus.edu (cc: hausbak@csus.edu) or mail to:
Geology 188 Application
C/o Geology Department
California State University, Sacramento
6000 J Street
Sacramento, CA 95819-6043

See the attached flyer for more information, schedule, fees, and deadlines. Please contact Brian Hausck at hauscak@cusu.edu if you have questions.

~ ~ ~ ~ ~ ~

SHORT TERM STUDY ABROAD PROGRAMS

The GREEN Program offers accredited 8-10 day programs which take students to epicenters of clean tech, sustainability, and innovative industries. Programs available winter, summer, or spring break. See attached flyer.

- Engage in hands-on, experiential education with industry experts and professionals
- Gain behind-the-scenes access to innovative clean energy facilities and sustainability projects
- Supercharge resumes with a global perspective and unique cultural experience
- Network and develop relationships with powerhouse student leaders and professionals
- Bridge the gap between traditional textbook learning and real-time industry insight
- Participate on world-class bucket list adventure excursions
- Earn an academic transcript for transfer credit short term abroad programs for future clean energy & sustainability leaders

Apply: www.thegreenprogram.com
REMINDER TO FILE FAFSA

All current students must file the Free Application for Federal Student Aid (FAFSA) by March 1 to receive priority consideration for federal, state and university-based financial aid. The Division of Financial Aid is available for questions at 765-494-5050 Monday through Friday from 8 a.m. to 5 p.m. Eastern time, or by emailing facontact@purdue.edu

For information or to complete forms visit: www.purdue.edu/dfa.

2016 RESEARCH EXPERIENCE ON SUSTAINABLE LAND AND WATER RESOURCES

The aim of the program is to introduce undergraduate students to the key elements of research on land and water resources that are essential to improving management practices, with a focus on Community-Based Participatory Research (CBPR) and diverse interdisciplinary research teams. Project take place on the main campus of the University of Minnesota, Minneapolis; on the Fond du Lac Reservation in Northern Minnesota; and at Salish Kootenai College on the Flathead Reservation in Montana. Program dates are from June 13-August 19, 2016. Now accepting applications. Deadline is March 2, 2016.

Find more information and to apply visit: http://reuslawr.wordpress.com

2016 WATER FOOD GLOBAL CONFERENCE

The University of Nebraska is hosting a Water for Food Global Conference. The conference will be held April 24 – 26 in Lincoln, NE where the theme will be Public-Private Partnerships for water and food security. We are calling for posters from graduate students that innovatively address current research focused on Water for Food at the University of Nebraska. If your abstract is accepted, your poster will be on display at the conference, where hundreds of international scientists, scholars and decision-makers from academia, government, industry, private foundations and NGOs will see and discuss your work with you.

Prizes will be awarded. Abstract Deadline: March 16, 2016
See more at: http://waterforfood.nebraska.edu/2016-water-for-food-global-conference-poster-competition/#sthash.yyK9EX65.dpuf

2016 CROSSROADS GEOLOGY CONFERENCE

The student members of the Rho chapter of Sigma Gamma Epsilon at Indiana University would like to extend a formal invitation to participate in the 16th annual Crossroads Geology Conference, April 1 & 2, 2016 at Indiana University in Bloomington.

Crossroads is a student-organized event featuring research presentations by graduate and undergraduate students across the Midwest. This conference is open to any student in earth, atmospheric, or planetary science to present their research. Students from other fields, such as archaeology, physics, or anthropology, are also welcome to present research relating to geological sciences.

Crossroads is free to all students and is an excellent opportunity to interact with judges from a variety of industry and academic fields. Awards will be presented to top oral and poster presentations for undergraduate and graduate students. In addition, students are encouraged to participate in the networking event, career panel discussion, and the campus tour exploring the geology of Indiana University building stones. Breakfast and lunch are provided on Friday and Saturday as well as appetizers during the networking social Friday evening.

Abstract templates are located on the Crossroads website along with submission information. Abstracts and resumes

National Water Center Innovators Program: Summer Institute of 2016

Incoming and current graduate students and post-docs (within three years of receiving their PhD) affiliated with US universities are invited to apply to participate in the National Water Center Innovators Program - Summer Institute of 2016 at the NOAA National Water Center and the University of Alabama in Tuscaloosa, AL from June 6 – July 20, 2016

Accepted applicants will have the opportunity to collaborate intensively for seven weeks on projects designed to contribute to the NWC goals of enhancing water-related products and decision-support services across the country. The Summer Institute will be led by faculty theme leaders and daily oversight will be provided by post-doctoral fellow course coordinators. Following the Summer Institute, students will be invited to attend the CUAHSI Biennial Meeting July 25-27, 2016 to present their work during a special session.

Application Deadline: Tuesday, March 15th.

Additional program information, including application instructions, can be found at https://www.cuahsi.org/summerinstitute
are due March 23rd. If you are interested in attending the conference and would like a student host to house you please let us know and we will attempt to find a host for you.

Additional information available at [http://www.indiana.edu/~sgeweb1/](http://www.indiana.edu/~sgeweb1/)
For additional inquiries contact [crossroadsgeologyconference@gmail.com](mailto:crossroadsgeologyconference@gmail.com)

**MERIT-BASED SUPPORT TO GRADUATE STUDENTS**

The EAPS Department provides the opportunity for merit-based support to graduate students to present their research at professional conferences. The maximum yearly amount of department support is $400 per graduate student (each fiscal year). Submit your form to Kathy Kincade (Room 2169D/HAMP) no later than one month prior to the start of the conference you plan to attend. Requests after the fact or after that timeframe will not be accepted.

**OUTREACH OPPORTUNITY**

**Science Olympiad Wildcard Tournament**

Ivy Tech is hosting a Science Olympiad Wildcard Tournament on Saturday, March 5th. They are seeking volunteers that would be willing to write an exam for the following events: Meteorology, Hydrogeology, Green Generation (sustainability/ecology). These events are for either jr. high (grades 6-8) or high school (grades 9-12), and they have lots of information and resources (including example tests) to help. If you are also willing to come administer and grade the event on March 5th, we offer free breakfast/lunch and t-shirts. Your help would be greatly appreciated! Please contact Erin Kerwood at [egerwood@ivytech.edu](mailto:egerwood@ivytech.edu)

**OTHER UNIVERSITY NEWS**

**APPLY FOR COS PROFESSIONAL DEVELOPMENT**

It is time to request nominations for the Summer 2016 Staff Professional Development Fund. These applications should be for professional development opportunities that will take place during May through August.

To apply, please complete the attached application and return to Angie Teel at [teel@purdue.edu](mailto:teel@purdue.edu) by Friday, March 11. A committee of fellow CoS staff members will then meet to evaluate the applications and make the final funding decisions by April 30.

**APPLY FOR APSAC GRANTS**

APSAC is now accepting applications for its individual professional development grants.

Examples of funded grant applications include but are not limited to professional education or certification; attendance at lectures, conferences and seminars; or tuition assistance for academic classes. The maximum award amount is $750. Applications for spring grants will be considered for activities occurring from Jan. 1, 2016, to Dec. 31, 2016.

The application process will be completed online, and the **deadline is 11:59 p.m. March 1** for this grant period. More information and a link to the online application are available at [www.purdue.edu/apsac](http://www.purdue.edu/apsac). Questions may be directed to the Professional Development Subcommittee at [APSAC-PD@purdue.edu](mailto:APSAC-PD@purdue.edu)

The committee is an academic consortium of Big Ten universities and the University of Chicago. The leadership program is designed to develop the leadership and managerial skills of faculty who have demonstrated exceptional ability and administrative promise.

Nominees for the upcoming program must electronically submit a complete curriculum vitae, an applicant letter of interest and a letter of support from one's department head endorsed by the dean.

Applicants can apply by submitting nomination materials to Annie Jarrard in the Office of the Provost at [ajarrard@purdue.edu](mailto:ajarrard@purdue.edu). The deadline to apply is March 14.

**FREE SCIENTIFIC WRITING AND PUBLISHING TOOL**

The Purdue Graduate School is sponsoring a free trial of Overleaf, an online collaborative scientific writing and publishing tool for all students, faculty and staff.

Overleaf is a LaTex/Rich Text editor designed to make the process of writing, editing and producing scientific papers much quicker for both the authors and the publishers. It offers real-time collaboration in one's browser with other authorized users. Users can be added or removed at any time. It also has integrated, streamlined publishing, which allows writers to publish immediately and directly to a specific journal. Overleaf users include dozens of publishing partners, with more to come in 2016.

Also included is a Purdue resource portal that includes Purdue templates, frequently asked questions and resource link.

Interested persons can sign up for free using an email address at Purdue, IUPUI, Purdue North Central, Purdue Calumet or IPFW.

For more information, contact Mark Jaeger at 765-496-3157, Ashlee Messersmith at 765-496-3312 or visit: [www.purdue.edu/gradschool/research/thesis/overleaf.html](http://www.purdue.edu/gradschool/research/thesis/overleaf.html)
SUMMER WORKSHOP IN MATHEMATICAL MODELING OF EARTH'S DYNAMIC SYSTEMS

This workshop will be an intense, hands-on introduction to the creation and use of numerical models as a method for investigating the dynamics of Earth systems. Participants will learn how to translate their understanding of Earth processes into systems of differential equations, and solve them to test hypotheses concerning both modern and ancient systems. In addition, participants will learn how to apply and evaluate selected existing Earth system models. The short course is open to graduate students and faculty. The event is from July 31-Aug 5, 2016 in University Park, PA. See the attached flyer for additional details and registration information.

JOBS

The Department of Natural Sciences at Shawnee State University invites applications for a one-year full-time Visiting Faculty position in Geology, to begin 2016. Applications due are due by March 7, 2016. If interested, apply at https://jobs.shawnee.edu/postings/2272 See flyer for additional details.

BIRTHDAYS

Greg Michalski – March 17
Larry Braile - March 21
Megan Sapp Nelson – March 24

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. Individual email announcements will no longer be sent unless the content is time-sensitive. We will continue to include our publications, presentations and other recent news items as well. Those using paper copies of the newsletter should go to our newsletter archive on the EAPS website at http://www.eaps.purdue.edu/news/newsletters.html and Click on News to access active links as needed. While Fallon is on leave, material for inclusion in the newsletter should be submitted to Jill (jwable@purdue.edu) by 5:00pm on Thursday of each week for inclusion in the Monday issue.

If it is in the newsletter, we assume you know about it and no other reminders are needed. For answers to common technology questions and the latest updates from the EAPS Technology Support staff, please visit http://www.eaps.purdue.edu/resources/information_technology/index.html. Also, as an additional resource for information about departmental events, seminars, etc., see our departmental calendar at http://www.EAPS.purdue.edu/events-calendar.html.
The atmosphere and ocean are strongly coupled through the sea surface energy balance. There have been many studies which have tried to link the generation of variability in one, the other, or both. Perhaps the most well-known of these studies is the Hasselmann red noise hypothesis, a theory which links the generation of low frequency variability to the integrated stochastic forcing of the ocean by the atmosphere. Others have tried to link observed low frequency variability through dynamical teleconnection patterns which allow remote influences to propagate long distances via atmospheric "bridges" and possibly oceanic "tunnels." For both stochastic-dynamic and dynamic-thermodynamic theories, understanding the surface energy budget, how it is regulated, and how feedbacks operate at the air-sea interface is of fundamental importance. These interactions are complicated by differing time scales of response owing to the large difference in thermal capacity between the atmosphere and ocean. There is also intrinsic variability, unforced by the other, in each system. Given the myriad of processes involved on disparate time scales combined with an often inadequate observing system and theory, it becomes clear why there remains so much uncertainty in these exchange processes.

In this work we are attempting to ascertain the role that high frequency variability plays in determining the coupling of the ocean and the atmosphere through the surface heat and water flux. In this talk I will first give an overview of current global water and energy budgets and the uncertainty in the ocean-atmosphere surface fluxes. I will discuss how we determine the turbulent heat fluxes from satellite and in situ measurements, with some analyses of the variability of global ocean-atmosphere heat water fluxes. Time permitting, I will then discuss the use of wavelets to evaluate high-frequency variability and the effect of inclusion of sub-monthly time scales on feedbacks between the atmosphere and ocean, and show some initial results. I will conclude with some thoughts about current research directions that the community is heading to reduce our uncertainty in these fluxes.

**The Role of the Ocean in the Global Climate**

**Carol Ann Clayson**
Woods Hole Oceanographic Institution
Asteroids and other small bodies are markers, like tiny beacons, relaying information about the initial temperature and composition conditions of our Solar System revealed by their surface compositions. The Solar System’s evolution may also be determined from the scattering record of these bodies. Today we are armed with major advancements from the past decade that have revolutionized the field of asteroids in areas such as discovery, physical characterization, meteorite links, and dynamical models. Based on tens of thousands of measurements from the Sloan Digital Sky Survey, in this talk I present a new compositional map of the asteroid belt that reveals a greater diversity of asteroids as a function of size and distance and discuss these results in the context of Solar System formation and evolution.

Thursday, March 10, 2016
3:30 p.m.
Room 1252 HAMP

Refreshments at 3:00 pm
Room 2201/HAMP
Gábor Csáthy  
Associate Professor of Physics and Astronomy  

Electronic Order in the Two-dimensional Electron Gas  

Electronic motion constrained to a plane found technological applications from computers to cell phones and it is well understood. However, under unusual physical conditions, such as very low levels of disorder, very low temperatures, and high magnetic fields, the two-dimensional electron gas exhibits a host of intriguing properties. The study of these properties initiated a new paradigm in contemporary condensed matter physics: that of topological quantum liquids. Today the two-dimensional electron gas is not only an interesting system in its own right, but also an experimental test bed for many novel ideas related to the concept of topological order.

In this presentation I will present a primer on the rich physics of this system, highlighting some recent results from my laboratory.

Bio: Gábor Csáthy received his bachelor’s degree from the University of Bucharest, Romania in 1994 and he obtained his doctoral degree from the Pennsylvania State University in 2001. From 2001-2006 he was a postdoctoral researcher at the Department of Electrical Engineering of Princeton University. He then joined the faculty at Purdue in 2006.

Dr. Csáthy is an experimental condensed matter physicist who specializes in electrical and thermodynamic measurements of nanoscale semiconductor devices at very low temperatures. His research is centered on the two-dimensional electron gas, one of the richest systems for the study of emergent phenomena related to both topological and traditional phases of matter. In particular, he is interested in phases with previously unanticipated topological order and non-Abelian quasiparticle statistics which, in the long run, may enable fault-tolerant quantum computing. At Purdue he has developed a special cryogenic technology and thermometry used to cool electronic devices to extremely low temperatures of 0.005 degrees Kelvin. This capability, together with other technology he uses, such as the generation of high hydrostatic pressures, led to the discovery of new ground states and allowed the study of others in previously inaccessible regimes.

Dr. Csáthy has received in 2014 the Seed for Success Award at Purdue. He is the author or coauthor of 36 peer reviewed publications and he presented 50 invited colloquia and condensed matter seminars, several of which overseas. In addition, Dr. Csáthy coauthored 43 contributed talks at conferences.
Zhao-Qing Luo
Professor of Biological Sciences

Building a home in a hostile environment: the means by a bacterial pathogen

Successful pathogens have evolved various strategies to thwart the killing by host immune cells to support their proliferation in the host. A common strategy used by bacterial pathogens is virulence factors also called effectors that are injected into host cells by specialized protein secretion systems. Using such a syringe-like structure, the pathogen Legionella pneumophila delivers more than 300 effectors into host cells. These effectors function to disable the killing mechanism of the host cells, thus allowing the bacterium to replicate in phagocytes. Our research is directing to determining the role of these effectors in bacterial infection by identifying their host targets and revealing their biochemical activity. In this presentation, I will discuss our findings in our study of these proteins, particularly our recent discovery of novel mechanisms of the interference with host ubiquitin signaling by this pathogen.

Bio: Zhao-Qing Luo joined the Purdue Faculty in 2004 after his postdoctoral training at Tufts Medical School. He studied Plant Pathology for his undergraduate and Master of Science degrees at Beijing Agricultural University and earned his PhD in Microbiology from the University of Illinois at Urbana-Champaign. Zhao-Qing’s research on bacterial pathogenesis and host response to infection has been continuously funded by the National Institutes of Health. He received the Independent Scientist Award from NIH-NIAID in 2010 and is a University Faculty Scholar. He is an Associate Editor for the journal PLoS Pathogens and has served in several NIH Study Sections.
Traditional computer forensics has mainly focused on uncovering evidence from non-volatile storage (e.g., disks). However, investigators have increasingly realized the value of evidence in a computer or smartphone's memory image, which contains "live" evidence left by program execution, such as recent chat contents, logins, and photos viewed. In this talk I will report results from our memory forensics research enabled by probabilistic inference and binary program analysis. First, I will present a method that discovers instances of a program data structure in a memory image, based on probabilistic inference on a set of Boolean constraints generated from data structure definitions and memory contents. Second, I will present a system that enables intuitive rendering of the discovered data structure instances in human-understandable format, by reusing relevant code in the application binary as rendering functions. Finally, to put memory forensics in a bigger picture, I will briefly present our ongoing development of an integrated, binary-centric framework for advanced persistent threat (APT) investigation, which covers the temporal, spatial, and behavioral aspects of APT forensics.

Bio: Dongyan Xu is a professor of computer science and a University Faculty Scholar at Purdue University. He is also affiliated with the Center for Education and Research in Information Assurance and Security (CERIAS). He has been on Purdue faculty since 2001, when he received his Ph.D. in computer science from the University of Illinois at Urbana-Champaign. His research efforts span computer systems security and forensics, cloud computing, and virtualization, with projects sponsored by both government agencies and industry. He is the co-author of a number of award-winning papers at major peer-reviewed conferences including RAID'08, SOCC'11, ASE'13, USENIX Security'14, CCS'15 and NDSS'16.
<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker</th>
<th>Affiliation</th>
<th>Host</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan. 21</td>
<td>Chuck Doswell, C. Doswell Enterprises, Inc.</td>
<td>Host: Tanamachi</td>
<td></td>
<td>“A Retrospective Look at the Relationship Between Academic Achievement and a Professional Career as a Scientist”</td>
</tr>
<tr>
<td>Jan. 28</td>
<td>Roshi Nateghi, Purdue University</td>
<td>Host: Baldwin</td>
<td></td>
<td>“Risk Analytics for the Impacts of Extreme Events on Infrastructure Systems”</td>
</tr>
<tr>
<td>Feb. 2</td>
<td>Kim Elmore, CIMMS and National Severe Storm Laboratory</td>
<td>Host: Baldwin</td>
<td></td>
<td>“mPING at NSSL: Past, Present and Possible Futures”</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Joint seminar w/Civil Engineering; 3:30 PM, Room 1144/HAMP</strong></td>
</tr>
<tr>
<td>Feb. 4</td>
<td>Darryl Granger, Purdue University</td>
<td></td>
<td></td>
<td>“Cosmogenic Nuclides: From Landscape Evolution to Human Evolution”</td>
</tr>
<tr>
<td>Feb. 11</td>
<td>Benjamin MacCall, Army Research Lab</td>
<td>Host: Sun</td>
<td></td>
<td>“The US Army Research Laboratory Atmospheric Science Center: A New Resource for the Characterization and Modeling of Boundary Layer Processes in Complex Terrain”</td>
</tr>
<tr>
<td>Feb. 18</td>
<td>Steve Jacobsen, Northwestern University</td>
<td>Host: Gilbert</td>
<td></td>
<td>“Earth’s Deep Water Cycle: Atomic to Geophysical Scales”</td>
</tr>
<tr>
<td>Feb. 23</td>
<td>Roby Douilly, PhD Candidate</td>
<td>Advisor: Freed</td>
<td></td>
<td>“3D Dynamic Rupture Simulations Following the 2010 Haiti Earthquake and Scenarios of Potential Earthquakes on the Enriquillo Fault”</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Tuesday, 4:00 PM, Room 2201/HAMP</strong></td>
</tr>
<tr>
<td>Feb. 25</td>
<td>James Hurrell, Director, NCAR</td>
<td>Host: Agee</td>
<td></td>
<td>“Research Highlights at NCAR in 2015”</td>
</tr>
<tr>
<td>Mar. 3</td>
<td>Carol Ann Clayson, Woods Hole Oceanographic Institution</td>
<td>Host: Agee</td>
<td></td>
<td>“The Role of the Ocean in the Global Climate”</td>
</tr>
<tr>
<td>Mar. 8</td>
<td>Ruth Aronoff, PhD Candidate</td>
<td>Advisor: Andronicos</td>
<td></td>
<td>“Garnet Geochronology Reveals a New Orogeny”</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Tuesday, 4:00 PM, Room 2201/HAMP</strong></td>
</tr>
<tr>
<td>Mar. 10</td>
<td>Francesca E DeMeo, Harvard-Smithsonian Center for Astrophysics</td>
<td>Host: Minton</td>
<td></td>
<td>“Asteroids as Records of Solar System History”</td>
</tr>
<tr>
<td>Mar. 24</td>
<td>Oliver Boyd, U.S. Geological Survey</td>
<td>Host: Gilbert</td>
<td></td>
<td>“Seismic Hazard and Geodesy in the New Madrid Seismic Zone”</td>
</tr>
<tr>
<td>Mar. 29</td>
<td>Jonathan Buzan, PhD Candidate</td>
<td>Advisor: Agee/Huber</td>
<td></td>
<td>“Quantifying Heat Stress and Their Relationship to Atmospheric Thermodynamics Due to Global Climate Change”</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Tuesday, 4:00 PM, Room 2201/HAMP</strong></td>
</tr>
<tr>
<td>Mar. 31</td>
<td>Daniella Rempe, University of Texas, Austin</td>
<td>Host: Frisbee</td>
<td></td>
<td>“The Ecological Significance of Landscape-scale Weathering Patterns And Rock Moisture: Observations from the Eel River Critical Zone Observatory in Northern California”</td>
</tr>
<tr>
<td>Date</td>
<td>Name</td>
<td>Institution</td>
<td>Advisor</td>
<td>Title</td>
</tr>
<tr>
<td>--------</td>
<td>-------------------------------</td>
<td>----------------------</td>
<td>----------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Apr. 5</td>
<td>Zhenong Jin, PhD Candidate</td>
<td>Advisor: Zhuang</td>
<td></td>
<td>“Using Crop Model to Assess and Mitigate the Impact of Climate Change on the US Agriculture System”</td>
</tr>
<tr>
<td>Apr. 7</td>
<td>Tiffany Shaw, University of Chicago</td>
<td>Host: Wu</td>
<td></td>
<td>“What Does the Seasonal Cycle Tell Us About the Atmospheric Circulation Response to Global Warming”</td>
</tr>
<tr>
<td>Apr. 12</td>
<td>Steeve Symithe, PhD Candidate</td>
<td>Advisor: Freed</td>
<td></td>
<td>“Active Deformation in the Caribbean and Southern Haiti”</td>
</tr>
<tr>
<td>Apr. 14</td>
<td>Catherine Macris, IUPUI</td>
<td>Host: Milbury</td>
<td></td>
<td>“Seconds after Impact: Insights from Tektites and Experiments”</td>
</tr>
<tr>
<td>April 21</td>
<td>No Seminar</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>April 26</td>
<td>Qianwen Luo, PhD Candidate</td>
<td>Advisor: Tung</td>
<td></td>
<td>“The Cloud-Radiative Forcing of the US Landfalling Atmospheric Rivers”</td>
</tr>
<tr>
<td>April 28</td>
<td>Marcia Bjornerud, Lawrence University</td>
<td>Host: Milbury</td>
<td></td>
<td>“Decoding the Record of Ancient Earthquakes: Pseudotachylytes from Norway, New Zealand and northern Wisconsin”</td>
</tr>
<tr>
<td>May 3</td>
<td>Christy Gibson, PhD Candidate</td>
<td>Advisor: Filley</td>
<td></td>
<td>“Influence of Wood Source and Temperature on Pyrogenic Organic Matter Induced Priming Effect in a High-Latitude Forest Soil”</td>
</tr>
</tbody>
</table>
LOOKING FOR AN EXCITING INTERDISCIPLINARY RESEARCH EXPERIENCE FOR SUMMER OR FALL 2016?

Join us for the annual Undergraduate Research Day in Discovery Park to learn more about research opportunities available through formal and informal research programs.

MARCH 4
11:30am - 2:00pm
MRGN 121

11:30-12:00: Dr. Tomás Díaz de la Rubia will provide a brief overview of Discovery Park
Undergraduate research interns will share their experiences

12:00-2:00: Lunch provided
Program staff and faculty will be on hand to discuss specific research opportunities and answer questions

Why should you consider undergraduate research?

✚ Engage in cutting edge interdisciplinary projects at Discovery Park
∙ Gain valuable skills and knowledge to apply in your future career
✚ Possible scholarship opportunities, depending on the internship program

All majors are encouraged to attend

LUNCH PROVIDED

Contact Information:
Maria Longoria-Littleton
mlongori@purdue.edu
Announcing the 2016 CSU Sacramento - Geology Field Camp (Geology 188)

Our course is a Spring 2016 offering, but note that the entire class is conducted from June 1 to July 10, 2016. Therefore, it would be very easy for students from other universities to take this course. Students at CSU campuses can apply for the course on their own campus through Intrasystem Concurrent Enrollment. In this system the student pays Spring semester tuition at their home campus and pays no tuition to the Sacramento campus. The only additional fee is the standard student field camp fee of $2850 paid by all CSU students (both from the Sacramento and any other CSU campus).

We are also hoping to allow students from non CSU campuses to apply. For those students please fill out the application form for “2016 Geology 188 Advanced Geologic Mapping” and send it in. We will give you further instruction on enrollment as that information becomes available.

Directions for Non-CSUS students interested in the Sacramento Geology Field Camp 2016:
Please apply by sending the application form and the Intrasystem Concurrent Enrollment form (both fully filled-out) to the Geology Dept. Office; to this address:

Geology 188 Application
c/o Geology Department
California State University, Sacramento
6000 J Street
Sacramento, CA  95819-6043

Alternatively, you may scan your application material to pdf and then email to geology@csus.edu.
(Also please cc: hausback@csus.edu)

No fees or deposits are needed at this time. If your course application is successful we will contact you and let you know how to pay the student course fee of $2850.

Keep in mind that the camp will begin on June 1, 2016 and we are in Sacramento for the first week of the course. You will be required to attend these lab sessions so you will need to find local accommodations for that period of time. Any accommodations for those initial days of the course are at your own expense. You might consider staying with family or friends that you might have in the Sacramento area.

We anticipate enrolling 12 or more non-CSUS students in the 2016 course but will not have exact numbers or results of your application until late January, at the earliest.

*Enrollment will remain open until the course is full.*
The GREEN Program offers accredited 8-10 day programs which take students to epicenters of clean tech, sustainability, and innovative industries. We invite you to join us during your next winter, summer, or spring break as we continue on our adventure towards a more sustainable future.

- Engage in hands-on, experiential education with industry experts and professionals
- Gain behind-the-scenes access to innovative clean energy facilities and sustainability projects
- Supercharge resumes with a global perspective and unique cultural experience
- Network and develop relationships with powerhouse student leaders and professionals
- Bridge the gap between traditional textbook learning and real-time industry insight
- Participate on world-class bucket list adventure excursions
- Earn an academic transcript for transfer credit

**Apply:** thegreenprogram.com

@GREENPROGRAM

#ONLYONTHEGREENPROGRAM
Microsoft Word for Thesis Writers

Strongly encouraged for: Master's & Ph.D. candidates currently writing theses using MS Word 
Interested Faculty & Staff 

Scheduled Sessions:

Word for MAC: Monday 3.07.2016 10 - 11:30AM SC 183
Word for PC: Monday 3.07.2016 5:30 - 7PM SC 231
Word for PC: Wednesday 3.23.2016 1:30 - 3PM HIKS G959
Word for PC: Friday 3.25.2016 9:30 - 11AM PHYS 026

An hour of content will be provided and the last 30 minutes will be Q&A

Candidates must pre-register using the following link:
https://ias.itap.purdue.edu/rgs/wgb_workshop.disp_online_workshop

These courses provide an overview of MS Word features that will help you quickly and easily format a thesis or dissertation meeting Purdue Graduate School requirements.

Topics to be covered will include:

- Table of Contents creation
- Using Section Breaks
- Next Page to control margins & pagination
- Landscape page creation
- Table creation
- Font embedding

Questions?

ASHLEE MESSESMITH - ASSISTANT | 765.494.3231 | amiley@purdue.edu
http://www.purdue.edu/gradschool/research/thesis/index.html
Mathematical Modeling of Earth’s Dynamic Systems:
Letting the Genie out of the Model

A Short Course

July 31 – August 5, 2016
University Park, Pennsylvania USA

Sandra Kirtland Turner (UC Riverside) and Lee Kump, David Pollard and Rudy Slingerland (Penn State), Course Instructors

This workshop will be an intense, hands-on introduction to the creation and use of numerical models as a method for investigating the dynamics of Earth systems. Participants will learn how to translate their understanding of Earth processes into systems of differential equations, and solve them to test hypotheses concerning both modern and ancient systems. In addition, participants will learn how to apply and evaluate selected existing Earth system models.

Agenda

Sunday, July 31, 2016: Arrivals and ice-breaker


Wednesday Aug. 3 (afternoon): Field trip/social event

Thursday Aug. 4: Introduction to Earth system models of intermediate complexity (GENIE) and full complexity Earth system models (general circulation models, ice-sheet models).

Friday Aug. 5: Opportunities to delve further into more sophisticated transport problems, EMICs, or GCMs.

Details

- Participants will have ample time to practice their skills creating and running models with help from the course instructors.
- Course enrollment is limited to 20 participants.
- Graduate students, postdoctoral associates, and early career faculty members will receive preference in the selection of participants.
- We anticipate that with the support of Penn State and our sponsors, the Agouron Institute and Princeton University Press, travel expenses, course fees and per diem costs of the participants will be minimal.

Those interested in participating in this workshop should send a curriculum vitae and a 1-page statement explaining their interest in participating and how they intend to put their new-found modeling skills to use in their research. Graduate students should provide the name of their advisors, their tentative thesis/dissertation titles, and an indication of whether they are pursuing an M.S. or Ph.D. degree. Please send all materials to Tina Vancas, Penn State Geosciences, 503 Deike Bldg., University Park, PA 16802 USA (tqs5@psu.edu).
In 2012, the University created a performance evaluation policy for staff which included a focus on capturing the professional development activities of staff throughout the year. The College of Science firmly believes that participation in professional development provides long lasting benefits to both the individual staff member and their department. As such, the College desires to support these activities.

**College of Science Professional Development Philosophy:**

- Professional development participation should be available to all full- or part-time, permanent staff—clerical, service, administrative/professional and managerial/professional.
- Professional development should focus on developing skills that will prepare staff to advance at Purdue or to perform their current duties more effectively.
- All supervisors are strongly encouraged to allow appropriate amounts of time for each staff person throughout the year to attend trainings that will help them accomplish their professional development goals. Approval for participation in such activities should be based on the business needs of each area.

**College of Science Professional Development Fund:**

In order to support staff professional development activities, the College has created a Professional Development Fund to financially assist with participation in trainings that involve fees or the purchase of training materials.

**Professional Development Fund Guidelines:**

- Professional Development funds are to be used to support College of Science staff’s participation in activities that will assist them in developing skills that will prepare staff to advance at Purdue or to perform their current duties more effectively.
- Award applications will be requested three times annually with approximately 10 awards per call. Funds requested may be used to defray costs associated with attending professional meetings or seminars, to participate in workshops, or to enroll in professional-oriented courses related to employment responsibilities. The funds must be utilized within two application cycles (Spring awards utilized by the end of Fall, etc.).
- Applications for amounts of up to $1000 will be accepted.
- Individuals are eligible for one award per calendar year.

**Application Deadlines:**

- Spring Application Call – application due by first Monday in October; decisions made by November 30
- Summer Application Call – application due by first Monday in March; decisions made by April 30
- Fall Application Call – application due by first Monday in June; decisions made by July 31
College of Science
Staff Professional Development Fund Application

Name: ________________________________________________

Position: ________________________________________________

Department: ________________________________________________

Phone: _________________ E-mail: _____________________________

1. Describe the professional development activity for which funds are requested. Please be specific in how you plan to use the funds requested.

2. What is the amount of funding being requested for this activity?

3. Indicate how participation in this proposed activity will contribute to your professional development. Please attach additional pages if necessary.

__________________________________   ______________________________
Applicant’s Signature      Supervisor’s Signature

__________________________________
Department Head’s Signature