EAPS WEEKLY NEWSLETTER
01 July 2019

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BE SURE TO CHECK OUT ALL OF THE EAPS COMMUNICATIONS MEDIA!
Facebook
Twitter
Department Magazine
Website News

HAVE A SAFE AND HAPPY FOURTH OF JULY CELEBRATION!

Independence Day
University Closed
Thursday, July 4

EAPS MEETINGS & EVENTS

Independence Day
University Closed
Thursday, July 4

EAPS FACULTY/STAFF RETREAT
August 16, 2019
8:30 AM – 5:00 PM
Beck Agricultural Center

EAPS FACULTY MEETINGS
Tuesday’s - 3:00 PM
HAMP 3201

August 20
August 27
September 10
September 17
October 22
November 12
December 3 (tentative)

PRIMARY COMMITTEE MEETINGS
3:00 PM
HAMP 3201

Tuesday, October 1
Tuesday, October 15 (vote)

http://www.eaps.purdue.edu/
EAPS ATMOSPHERIC SCIENCE UNDERGRAD GAINS EXPERIENCE

EAPS Atmospheric Science undergraduate, Allison Plumadore, gains experience at the National Weather Service office in Miami, Florida. Photo depicts Allison conducting a NWS balloon launch on June 17, 2019. These upper-air balloon soundings gather useful data required for daily initialization of numerical weather prediction models.

Photo courtesy of the National Weather Service, Miami Florida

CIMMS RESEARCH ASSOCIATE – TRANSPORTATION – RELATED WARNINGS

The cooperative institute for Mesoscale Meteorological Studies (CIMMS) at The university of Oklahoma (OU) seeks to fill a Research Associate position for its collaborative research with the National Oceanic and Atmospheric Administration (NOAA) National Severe Storms Laboratory (NSSL) at the National Weather Center (NWC) in Norman, Oklahoma. This position will start in FALL 2019 to develop impacts-based decision support tools as a part of the Transportation Applications Team. This team works collaboratively with the National Weather Service (NWS) and the Federal Aviation Administration (FAA) to develop the next generation of products and tools for use within operations, with particular focus on decision support for transportation-related warnings/advisories (e.g., blizzards, aircraft hail encounters, icing, etc). This position is located in Norman, Oklahoma.

[See attached flyer for more information]

POSTDOCTORAL RESEARCH ASSOCIATE

Seeking Postdoctoral Researcher(s) to work on NASA funded projects to further develop data assimilation capabilities with the Community Land Model using the Data Assimilation Research Testbed to improve our understanding of the global carbon cycle. This position will be located at the national Center for Atmospheric Research in Boulder, CO.

Details here: https://uacareers.com/postings/37793.

ASSOCIATE SCIENTIST, EARTH SCIENCES

Entry level MS position supporting GPM at NASA Goddard.

In this position, the researcher will conduct research to advance ground validation activities for the NASA Global Precipitation Measurement (GPM) mission. The research will fall into three task areas: (a) characterizing uncertainties in satellite and ground-based (radar, dense gauge networks) rainfall estimates over a broad range of space/time scales; (b) using data from synergistic missions/sensors (e.g. SMOS, SMAP, GRACE, MODIS) to characterize correct detection or false alarms in GPM products; and (c) characterizing uncertainties in hydrologic models and understanding propagation of input uncertainties into model forecasts. The research involves work on retrospective regional analysis, retrospective

http://www.eaps.purdue.edu/
global analysis, and real-time global analysis. The researcher will leverage existing open source modeling platforms including NASA’s Land Information System (LIS) to conduct these analyses. Details here: https://usra-openhire.silkroad.com/epostings/index.cfm?fuseaction=app.jobinfo&jobid=907&version=1#.XN6VW hygI6.twitter

KAVLI CIVIC SCIENCE FELLOW

Are you passionate about civic science, including science outreach, communication, and public engagement? We, a collaboration of scientific societies, are looking for someone to lead an initiative that will increase the support and incentives for scientists who incorporate civic science into their work. The Kavli Civic Science Fellow is an ideal position for someone who has experience in civic science and is looking for an opportunity to think more broadly about advancing the field. This fellowship presents a remarkable opportunity to work with leaders across multiple scientific societies, while ultimately, influencing the culture of science and its relevance to society.

The American Society for Cell Biology (ASCB), the American Association for the Advancement of Science (AAAS), the American Geophysical Union (AGU) and Research!America are partnering to support the work of a Kavli Civic Science Fellow who will work across multiple scientific societies to connect, and advance the societies’ collective support so that scientists are empowered to undertake civic science activities. As part of their work, the Kavli Civic Science Fellow will follow a collective impact model that will rely on strategizing, data collection, and analysis and team building. The goal of the fellowship is to lay the groundwork for a more cohesive whole among societies, as they work towards influencing long-term culture change within the scientific enterprise to increase value and support for meaningful civic science engagement. This position is an 18-month fellowship.

The Kavli Civic Science Fellow will have the opportunity to shape the activities of the fellowship, with leaders from multiple scientific societies, to meet this larger goal. By working with a wide range of scientific societies, the Kavli Civic Science Fellow along with the scientific societies will set a common agenda, which establishes an agreed understanding of the problem and a shared vision of change. They will then work to establish common progress measures and mutually reinforcing activities.

Some of the activities that may be undertaken by the Kavli Civic Science Fellow in collaboration with representatives from the scientific societies may include:

- Conduct a landscape assessment of scientific societies’ visions, goals, capabilities, programs and opportunities related to civic science.
- Recommend ways in which scientific societies can leverage their strengths and authorities to encourage academic and funding institutions to provide deeper support for civic science— including altering their incentive structures.
- Highlight existing resources and speed the development of new resources that support scientific societies’ planning, implementation, and evaluation of civic science, including resources that societies make available to their members.
- Increase collaboration among scientific societies to accomplish work at the grassroots level and to find efficiencies in the existing system and leverage these efficiencies to better support societies of varying sizes and scales that want to encourage their members to do effective civic science engagement.

The candidate will also be part of the inaugural class of Civic Science Fellows. The Fellowship will embed emerging leaders from diverse backgrounds in organizations working at the many interfaces of science and society. Additional fellows will be hired by other organizations later this year. The benefits of being a Civic Science Fellow include access to a network of Fellows at other institutions, professional development in subject matter as well as leadership skills, and mentoring.

Requirements
- Master’s degree or higher in science, science communication or related field.
• Experience in an aspect of civic science: science outreach, public engagement, science communication.
• Experience in program or project management.
• Understanding of the culture of science and scientific societies or similar organizations is desirable.
• Strong written and verbal communication skills.
• Ability to work independently.
• Comfortable working with CEOs and with mid-level staff who run programs.
• Possess initiative, be entrepreneurial, and think strategically and long-term.

ASCB will be the fiscal and administrative home institution for the Fellow, who will spend time in several other societies located in the DC area in a series of 2 month rotations. This is an 18-month position. The salary for this fellowship is $80K per year plus benefits.

Please submit a cover letter with salary requirements and resume. Apply at: https://recruiting.paylocity.com/Recruiting/Jobs/Apply/118055

CIMMS Research Scientist
Planetary Boundary Layer Modeler

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at The University of Oklahoma (OU) is currently looking for an early-career Research Scientist to provide scientific and meteorological expertise in the areas of planetary boundary layer (PBL)/turbulence parameterization schemes for high-resolution numerical modeling in support of the Warn-on-Forecast program at the National Severe Storms Laboratory (NSSL). In addition to PBL modeling expertise, this Research Scientist will also require experience in the evaluation of numerical model output using PBL observations obtained from research platforms like the NSSL Collaborative Lower-Atmosphere Mobile Profiling System or unmanned aircraft systems.

As part of this opportunity, the Research Scientist will explore the potential for new and emerging PBL profiling systems under development in the international community (e.g. water vapor differential absorption lidars) to enhance NSSL’s mission of understanding severe convective weather processes and supporting National Weather Service forecast operations. The incumbent will also propose revised scientific priorities for observing, analyzing, and modeling the PBL in relation to severe convective weather as new knowledge is generated. The incumbent will work directly with research scientists at NSSL and will be encouraged to collaborate actively with scientists from other institutions with expertise in PBL profiling and research (e.g. OU and NOAA/ESRL/Global Systems Division and Physical Science Division). The position will be based in Norman, OK within the National Weather Center (NWC), a highly collaborative forecasting, research, and academic environment containing a number of NOAA and OU organizations.

[See attached flyer for complete information]

CIMMS WARN-ON-FORECAST SCIENTIFIC PROGRAMMER

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at The University of Oklahoma (OU) seeks to fill a Scientific Programmer position to support the National Oceanic and Atmospheric Administration (NOAA) National Severe Storms Laboratory’s (NSSL) Warn-on-Forecast (WoF) research and development program. This position is located in Norman, Oklahoma.

[See flyer for complete details]

THE GORDON RESEARCH CONFERENCE ON RADIATION & CLIMATE

Applications are now being accepted for the upcoming Gordon Research Conference (GRC) on Radiation and Climate and associated Gordon Research Seminar (GRS) for early career scientists.

Bridging Spatial and Temporal Scales in Radiation and Climate
July 21-26, 2019
Bates College, Lewiston, ME

http://www.eaps.purdue.edu/
GRC Chairs: Andrew Gettelman and Bastiaan van Diedenhoven
GRS Chairs: Carolin Klinger and Elin McIlhattan

Since physical processes related to radiation and climate occur on scales from the microscale to the global, and from seconds to ice ages, bridging observations and modeling between such scales is challenging but crucial. Each range of spatial and temporal scales adds knowledge and understanding. Topics of this conference will include: ice and liquid clouds, aerosols, climate sensitivity, dynamics, greenhouse gases and the Arctic. Each topic will be discussed from the perspectives of various contrasting scales with a focus on measurement, modeling and theory to analyze critical radiation and climate questions.

Posters are invited on all of these topics. As is custom with GRCs, there will be time for discussion, reflection, and interaction across disciplines. Link to GRC site and application

Additionally, a Gordon Research Seminar (GRS) for early career scientists will be held July 20-21. The GRS is a 2-day meeting immediately preceding the GRC that enables graduate students, post-docs, and other scientists with comparable levels of experience to come together in a highly-stimulating and non-intimidating environment to discuss their current research and build informal networks with their peers. Those interested in attending both the GRS and GRC must submit an application to each. Link to GRS site and application

***Please note that the number of GRS participants is limited to 60 people. We advise you to apply early to secure your place***

If you have any questions or would like further information on the GRC please contact Andrew Gettelman, or for the GRS contact Elin McIlhattan.

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Keynote Speaker: Neeli Bendapudi, Present, University of Louisville
Keynote Title: Authentic Leadership

Neeli Bendapudi is the 19th President of the University of Louisville. She received her Ph.D. in Marketing from the University of Kansas and has taught at The Ohio State University and Texas A&M University. She most recently served as Provost and Executive Vice Chancellor at the University of Kansas, where she had previously been Dean and H.D. Price Professor of Business at the KU School of Business. Professor Bendapudi specialized in the study of consumer behavior in service contexts. Her research deals with customers’ willingness and ability to maintain long-term relationships with firms and with the brands and employees that represent them. Her research has been published in top tier journals including the Journal of Academic Medicine, Harvard Business Review, and journal of Marketing, and featured by popular media outlets including the New York Times, CNBC, CNN, MSNBC, WebMD and Fox News Network. She has experience on public and private boards and served as EVP and Chief Customer Officer of Huntington National Bank. Her vision is to ensure that the University of Louisville is a great place to learn, a great place to work, and a great place to invest, because it celebrates diversity, fosters equity, and strives to achieve inclusion.

[See attached flyer for complete information]
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](http://www.eaps.purdue.edu/news/newsletters.html) and Click on News to access active links as needed. Material for inclusion in the newsletter should be submitted to Katherine Huseman (khuseman@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.htm](http://www.eaps.purdue.edu/resources/information_technology/index.htm).

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](http://www.EAPS.purdue.edu/events-calendar.html)
CIMMS Research Associate – Transportation-Related Warnings

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at The University of Oklahoma (OU) seeks to fill a Research Associate position for its collaborative research with the National Oceanic and Atmospheric Administration (NOAA) National Severe Storms Laboratory (NSSL) at the National Weather Center (NWC) in Norman, Oklahoma. This position will start in Fall 2019 to develop impacts-based decision support tools as a part of the Transportation Applications Team. This team works collaboratively with the National Weather Service (NWS) and the Federal Aviation Administration (FAA) to develop the next generation of products and tools for use within operations, with particular focus on decision support for transportation-related warnings/advisories (e.g., blizzards, aircraft hail encounters, icing, etc). This position is located in Norman, Oklahoma.

The duties of this position will be to:
1. Work collaboratively with the NWS and FAA to develop decision-support tools for use in operations
2. Assist with quality control and evaluation of observations within the Multi-Radar/Multi-Sensor (MRMS) system (http://mrms.nssl.noaa.gov)
3. Publicly disseminate results via formal publications and professional conferences
4. Keep abreast of new science in emerging journal articles and at conferences/workshops

The minimum qualifications for the position are:
1. A Master’s Degree in Meteorology, Geography, Civil Engineering, or another related area
2. Experience with computer programming and interest in further development of these skills (most of our products are written in C++, Python, or Fortran)
3. Experience with visualization of meteorological datasets
4. Strong written and verbal communication skills.

Expertise with any of the above skills is not required, but a willingness to tackle new science, the ability to quickly learn new computer-programming skills, and independence in decision making are critical for success in this position. Applicants whose cover letters speak to these things in the context of their previous research experience(s) will be given the strongest consideration.

Supervision will be provided by CIMMS staff. The incumbent is not expected to supervise other employees, but may eventually serve as a science/technical lead and/or supervise students. The beginning salary will be based on qualifications and experience. Standard retirement/health care benefits are included (more information may be found at http://www.hr.ou.edu). The incumbent would ideally start in early Fall 2019, but the starting date is negotiable.

To apply for the position, please forward your resume, cover letter and list of three references to:
Tracy Reinke, Executive Director, Finance and Operations
University of Oklahoma CIMMS
120 David L. Boren Blvd., Suite 2100
Norman, OK 73072-7304
treinke@ou.edu
ATTN: Transportation Applications
CIMMS Research Scientist – Planetary Boundary Layer Modeler

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at The University of Oklahoma (OU) is currently looking for an early-career Research Scientist to provide scientific and meteorological expertise in the areas of planetary boundary layer (PBL)/turbulence parameterization schemes for high-resolution numerical modeling in support of the Warn-on-Forecast program at the National Severe Storms Laboratory (NSSL). In addition to PBL modeling expertise, this Research Scientist will also require experience in the evaluation of numerical model output using PBL observations obtained from research platforms like the NSSL Collaborative Lower-Atmosphere Mobile Profiling System or unmanned aircraft systems.

As part of this opportunity, the Research Scientist will explore and develop new modeling approaches for PBL processes related to forecasting severe convective weather to support the NSSL Warn-on-Forecast System. Furthermore, the Research Scientist will explore the potential for new and emerging PBL profiling systems under development in the international community (e.g. water vapor differential absorption lidars) to enhance NSLL’s mission of understanding severe convective weather processes and supporting National Weather Service forecast operations. The incumbent will also propose revised scientific priorities for observing, analyzing, and modeling the PBL in relation to severe convective weather as new knowledge is generated. The incumbent will work directly with research scientists at NSSL and will be encouraged to collaborate actively with scientists from other institutions with expertise in PBL profiling and research (e.g. OU and NOAA/ESRL/Global Systems Division and Physical Science Division).

The position will be based in Norman, OK within the National Weather Center (NWC), a highly collaborative forecasting, research, and academic environment containing a number of NOAA and OU organizations.

The principal duties of this position are:

1. Provide scientific and technical expertise in the development and use of PBL and land surface schemes to advance high-resolution modeling of processes related to convection initiation and severe convective weather.

2. Apply numerical approaches to enhance the representation of storm-scale processes in various geographic locations and environmental regimes at high spatio-temporal resolution.

3. As needed, represent NSSL/CIMMS by contributing to scientific publications and presenting scientific results at professional off-site conferences, workshops, symposia, and hazardous-weather-related outreach events.

The ideal candidate for this position would possess a PhD in meteorology or atmospheric science and have extensive experience in the use, evaluation, and modification of PBL schemes in state of the art numerical weather prediction models (i.e., WRF-ARW, FV3, etc). In addition, knowledge and expertise in areas of ground-based remote sensing, dynamics of the boundary layer, and severe convective weather knowledge is also a plus. Applicants should identify their experience in the
above areas. Experience with field work and leading peer-reviewed publications is especially desirable.

The incumbent will work under general supervision, and is expected to contribute to field efforts as needed, but will work independently and determine his/her own specific research project(s) related to the position description.

The beginning salary for this position will be based on qualifications and experience and will include University benefits. Information on benefits may be found at: http://hr.ou.edu. The start date for the position is negotiable but prior to August 1, 2019.

Appointment to this position is contingent on passing a Department of Commerce/NOAA background check.

To apply, please forward your CV, cover letter and list of three references to:

Tracy Reinke,
Executive Director, Finance and Operations
University of Oklahoma CIMMS
120 David L. Boren Blvd., Suite 2100
Norman, OK 73072-7304
treinke@ou.edu
The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at The University of Oklahoma (OU) seeks to fill a Scientific Programmer position to support the National Oceanic and Atmospheric Administration (NOAA) National Severe Storms Laboratory’s (NSSL) Warn-on-Forecast (WoF) research and development program. This position is located in Norman, Oklahoma.

Background:
The WoF program is developing a regional, convective-scale numerical weather prediction (NWP) model-based ensemble data assimilation and prediction system with the goal to increase warning lead times of hazardous weather events. A successful candidate for this position will help develop an experimental WoF system within NOAA’s Unified Forecast umbrella, which will use the stand-alone-regional (SAR) Finite Volume Cubed Sphere (FV3) dynamical core and the Joint Effort for Data Assimilation Integration (JEDI) system. The incumbent will develop new code and/or optimize existing SAR-FV3 and JEDI code for WoF application. This position requires an individual with a strong interest in software development, model building, and a desire to aid in the construction of a software infrastructure that will eventually be used for both research and operations within NOAA and academia. While a candidate will need to be self-directed, he/she will work closely with members of NSSL’s WoF team, scientists and developers from a wide variety of research and operational organizations (e.g., NOAA’s Environmental Modeling Center, other OAR laboratories, and our academic partners) to accomplish the primary job responsibilities listed below. The research and operational working environment here at NSSL within the National Weather Center in Norman, OK will provide the candidate with ample opportunities for career advancement.

Primary Job Responsibilities:
1) Code optimization, development and testing of SAR FV3 model for high-resolution ensemble modeling (e.g., WoF system).
2) Code optimization, development and testing of NSSL’s WoF system using the new JEDI software and the SAR FV3.
3) Development of workflow systems that can be used by the research community for running the SAR FV3 – JEDI WoF system
4) Research and establish the computational requirements for operational implementation of WoF system with our partners at NOAA’s Environmental Modeling Center.

Desired Qualifications:
• A MS degree in Meteorology, Computer Science, Atmospheric Science, Software Engineering, or closely related field with at least 5 years of professional experience OR PhD in one of those areas with at least 2 years of experience as a scientific programmer and researcher.
• Strong computer programming skills with particular emphasis on Fortran, C/C++, Object Oriented Programming and modern scripting languages (Python, NCL, Shell scripting)
• Experience with running NWP models (e.g., FV3, MPAS, WRF-ARW, HWRF) and modifying code within the models.
• Experience with running ensemble data assimilation software (e.g., NOAA’s GSI EnKF, NCAR’s DART system).
• Experience with version control software, especially Git.
• Experience with using cloud computing platforms for HPC or related applications.
• Ability to work and communicate effectively in diverse team environments.

The salary will be based on qualifications and experience with benefits provided through the University of Oklahoma (https://hr.ou.edu/). The start date for the position is negotiable.

To apply for the position, please forward your resume, cover letter and list of three references to:

    Tracy Reinke  
    Executive Director, Finance and Operations  
    University of Oklahoma CIMMS  
    120 David L. Boren Blvd., Suite 2100  
    Norman, OK 73072-7304  
    treinke@ou.edu  
    ATTN: WoF Scientific Programmer

_The University of Oklahoma is an equal opportunity/Affirmative Action employer._
SAVE THE DATE

Achieving Promotion: You Can Do It!

Conference for Pre-Tenure Women
September 5-6, 2019

Keynote Speaker:
Neeli Bendapudi,
President, University of Louisville

Keynote Title: Authentic Leadership

Neeli Bendapudi is the 18th President of the University of Louisville. She received her Ph.D. in Marketing from the University of Kansas and has taught at The Ohio State University and Texas A&M University. She most recently served as Provost and Executive Vice Chancellor at the University of Kansas, where she had previously been Dean and H.D. Price Professor of Business at the KU School of Business. Professor Bendapudi specializes in the study of consumer behavior in service contexts. Her research deals with customers’ willingness and ability to maintain long-term relationships with firms and with the brands and employees that represent them. Her research has been published in top tier journals including the Journal of Academic Medicine, Harvard Business Review, and Journal of Marketing, and featured by popular media outlets including the New York Times, CNBC, CNN, MSNBC, WebMD and Fox News Network. She has experience on public and private boards and served as EVP and Chief Customer Officer of Huntington National Bank. Her vision is to ensure that the University of Louisville is a great place to learn, a great place to work, and a great place to invest, because it celebrates diversity, fosters equity, and strives to achieve inclusion.

Registration link will be available soon.
The keynote is open to all faculty.
www.purdue.edu/butler