

# Computational Science and Engineering Software Sustainability and Productivity (CSESSP) Challenges Workshop

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*Exceptional  
service  
in the  
national  
interest*

- Organizers:
- Gabrielle Allen, University of Illinois Urbana-Champaign, USA
- Michael Heroux, Sandia National Laboratories
  
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- Ethan Coon, LANL

# CSESSP Challenges Workshop Organizers

# CSESSP Challenges Workshop Summary

- October 15-16, 2015, Rockville, MD
- Three Keynotes
  - *The Challenges of Writing and Maintaining Scientific Software in High Energy Physics*
    - Robert Roser, Fermi Lab
  - *Productivity and Sustainability in Disruptive Times*
    - Bob Lucas, USC, LSTC
  - *Scientific Computing's Productivity Gridlock and How Software Engineering Can Help*
    - Stuart Faulk, University of Oregon

# CSESSP Challenges Workshop Summary

- 48 short papers submitted
- 15 Lightning talks
- 15 poster presentations
- Eight working tracks
  - Opportunities from Improved CSE SW Sustainability and Productivity
  - CSE Software in Industry/Manufacturing
  - Economics of Software Tools
  - Social Sciences Applied to CSE Software Systems
  - Workforce Development
  - Role of Software Engineering Research
  - Measuring Software Productivity and Performance
  - New Approaches for Faster, More Affordable CSE Software
- *Workshop report: Target completion: April 15, 2016*

# Attendees: Crosscutting

- 86 Attendees
  - 25 Government
    - NSF, NIST, NASA, FDA, Navy, Army, DOE, NITRD, DoD
  - 20 National Labs
    - ORNL, Los Alamos, Sandia, Argonne, LBNL, NCSA, Fermi
  - 30 Academic
  - 11 Industry
    - GE, Rolls Royce, DuPont, multiple software developers/researchers
- Conjecture: No Single attendee knew more than half of the other attendees.