SC17 Birds of a Feather on

Software Engineering and Reuse in Computational Science and Engineering

Organizers					
David Bernholdt	Oak Ridge National Laboratory	Gerard Gorman	Imperial College, London	Randall LeVeque	University of Washington
Maxim Belkin	University of Illinois	William Gropp	University of Illinois	James Lin	Shanghai Jiao Tong University
Alys Brett	Culham Centre for Fusion Energy	Michael Heroux	Sandia National Laboratories, St. John's University	Lois Curfman McInnes	Argonne National Laboratory
Jeffrey Carver	University of Alabama	Daniel S. Katz	University of Illinois	Kengo Nakajima	University of Tokyo
Neil Chue Hong	University of Edinburgh	David Keyes	King Abdullah University of Science and Technology	Andy Terrell	NumFOCUS
Mike Folk	HDF Group	Scott Lathrop	National Center for Supercomputing Applications, University of Illinois Shodor Education Foundation		

BOF web site: https://swe-cse.github.io/

SC17 evaluation survey: http://bit.ly/sc17-eval **Discussion notes:** http://bit.ly/swe-bof

Motivation and Goals

- Software developers, researchers, trainers, and outreach staff will meet to **raise awareness of the challenges and opportunities for developing and promoting software engineering practices, including the development of reusable software** to enhance the computational science and engineering ecosystem for HPC systems to accelerate the "time to science".
- The BoF attendees will help **develop an international "community of practice"** to share experiences in developing quality software, gathering community feedback, addressing interoperability, and promoting software to applications developers and users.
- We will identify strategies for ongoing efforts to inform, engage, and benefit the community and thereby advance the HPC software ecosystem.

BOF web site: https://swe-cse.github.io/

SC17 evaluation survey: http://bit.ly/sc17-eval **Discussion notes:** http://bit.ly/swe-bof

Agenda

Time	Topic	Speaker/Moderator
3 min	BOF Introduction	David E. Bernholdt
10 min	Building Portable Software: Finding a Middle Ground	William Gropp
24 min	Lightning Talks (8)	various
58 min	General Discussion	Scott Lathrop, audience
10 min	Wrap-Up and Next Steps	Scott Lathrop, audience

BOF web site: https://swe-cse.github.io/

SC17 evaluation survey: http://bit.ly/sc17-eval **Discussion notes:** http://bit.ly/swe-bof

Lightning Talks

	Topic	Speaker	Affiliation
1	Better Scientific Software	Lois Curfman McInnes	Argonne National Laboratory
2	NumFOCUS & Sustainable Software	Daniel S. Katz	University of Illinois at Urbana-Champaign
3	Technical Consortium on High Performance Computing: Software Engineering Initiative (TCHPC/SE)	George K. Thiruvathukal	Loyola University of Chicago
4	Software Engineering Practices Three basics & One future wish	Catherine Jones	STFC Rutherford Appleton Laboratory
5	ESIP Software Sustainability Guidelines: A Big Tent Approach	Soren Scott	The Ronin Institute
6	Software Engineering Initiative of DLR	Andreas Schreiber	German Aerospace Center (DLR)
7	Commercial Software, aka Ultimate Software Reuse	Dave Pearah	The HDF Group
8	Promoting Reusable Software: Webinars and Publications	Scott Lathrop	NCSA, University of Illinois at Urbana-Champaign

BOF web site: https://swe-cse.github.io/

SC17 evaluation survey: http://bit.ly/sc17-eval **Discussion notes:** http://bit.ly/swe-bof