# WSSSPE4 Summary

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Workshop on Sustainable Software for Science: Practice and Experiences (WSSSPE5.1) 6 September 2017, Manchester, UK





National Center for Supercomputing Applications University of Illinois at Urbana–Champaign

#### **WSSSPE4** details

- 2<sup>1</sup>/<sub>2</sub> days, 12-14 September 2016, Manchester UK
- http://wssspe.researchcomputing.org.uk/wssspe4/
- Long report:
  - D. S. Katz, K. E. Niemeyer, S. Gesing, L. Hwang, W. Bangerth, S. Hettrick, R. Idaszak, J. Salac, N. Chue Hong, S. Núñez Corrales, A. Allen, R. S. Geiger, J. Miller, E. Chen, A. Dubey, P. Lago, "Report on the Fourth Workshop on Sustainable Software for Science: Practice and Experiences (WSSSPE4)," arXiv:1705.02607 [cs.SE], https://arxiv.org/abs/1705.02607
- Short(er) paper:
  - Under review in JORS, draft at https://github.com/WSSSPE/meetings/blob/master/WSSSPE4\_report/W SSSPE4\_paper.tex



## **WSSSPE Mission/Vision**

- WSSSPE is an international community-driven organization that promotes sustainable research software by addressing challenges related to the full lifecycle of research software through shared learning and community action.
- **Vision.** We envision a world where research software is accessible, robust, sustained, and recognized as a scholarly research product critical to the advancement of knowledge, learning, and discovery.
- **Focus areas.** WSSSPE promotes sustainable research software by positively impacting:
  - **Principles and Best Practices**. Promoting best practices in sustainable software
  - **Careers**. Developing and supporting career paths in research software development and engineering
  - Learning. Engaging in activities to promote peer learning and interaction
  - Credit. Ensuring recognition of research software as an intellectual contribution equal to other research products



## **WSSSPE4** intent

- Developed vision/mission, and most work aimed at working groups
- Started with existing working groups
- Used submissions to present ideas to
  - Continue, change, add working groups
- In two tracks:
  - Track 1 Building a sustainable future for open-use research software: defining a vision of the future of open-use research software, and in the workshop, initiating the activities that are needed to get there.
  - Track 2 Practices & experiences in sustainable scientific software: improving the quality of today's research software and the experiences of its developers by sharing best practices and experiences.
- At WSSSPE4
  - Working groups meet, define specific plans to make progress, get feedback from larger community, start work
- After WSSSPE4
  - Working groups continue to make progress



## **WSSSPE4 working groups**

- Verifying best practices & metrics for sustainable research software
- Software Sustainability Alliance
- Scientific Software Prototyping Infrastructure (S2PI)
- Standard metadata for software (CodeMeta)
- White paper on developing sustainable software
- Social science for scientific software
- Software best practices for undergraduates
- Meaningful metrics for sustainable software
- Coordinating access to CI for research software
- Software engineering processes tailored for research software
- Open research index
- Letters of evaluation for computational scientists



#### **WSSSPE4** status

- Working group progress
  - Coming up from Stephan Druskat & Working Group representatives
- Survey at end of WSSSPE4
  - 44 respondents (2/3 of total, almost all who were at end of WSSSPE4)
  - Highly satisfied with event; interested in continuing WSSSPE activities
  - Mix of topics and types of interactions (talks, groups) well balanced
  - Some desire for time for Q&A after talks and general discussions
  - Most will remain engaged in WSSSPE working group initiatives
  - Grateful for the opportunity to network & explore new collaborations

