David E. Bernholdt, CASS Steering Committee member and chair

https://cass.community

<u>cass-steering-committee</u> <u>@email.ornl.gov</u>

Introducing the Consortium for the Advancement of Scientific Software (CASS)



This material is based upon work supported by the U.S. Department of Energy, Office of Science, Office of Advanced Scientific Computing Research, Next-Generation Scientific Software Technologies program, under contract numbers DE-AC02-06CH11357 (ANL), KJ0401010/FWP CC141 (BNL), DE-AC02-05CH11231 (LBNL), DE-AC52-07NA27344 (LLNL), DE-AC05-000R22725 (ORNL), DE-AC06-76RL01830 (PNNL), DE-NA0003525 (SNL), and Triad National Security LLC ('Triad') contract grant 89233218CNA000001 (LANL)



# CASS: Stewardship and Advancement of the Scientific Software Ecosystem

- A federation of member organizations supporting specific communities or providing crosscutting capabilities related to scientific software stewardship
- Inward-facing activities to support and enhance software products
  - Improving software development practices, sustainability, quality, trustworthiness
  - Improving user experience, integration into the larger ecosystem
- Outward-facing activities to
  - Curate the collection of software products,
  - Help teams find and engage with users
  - Help the community find and use software that might benefit them



# Origins and Founding Members

- Launched by 8 software stewardship organizations (SSOs) supported by the U.S.
   DOE, Office of Advanced Scientific Computing Research (ASCR)
  - Targeted ecosystem initially includes the ECP Software Technologies software products and other ASCR-supported software

## **COLABS**

Training, workforce development, and building the RSE community

# **CORSA**

Partnering with foundations to provide sustainable pathways for scientific software

#### **FASTMATH**

Stewardship, advancement, and integration for math and ML/AI packages

## **PESO**

Stewarding, evolving and integrating a cohesive ecosystem for DOE software

#### **RAPIDS**

Stewardship, advancement, and integration for data, visualization and ML/AI packages

## **S4PST**

Stewardship, advancement and engagement for programming systems

#### **STEP**

Stewardship, advancement of software tools for understanding performance and behavior

#### **SWAS**

Stewardship and project support for scientific workflow software and its community



# Engage with CASS!

- Join our (low-volume) announcement mailing list to follow our activities: http://eepurl.com/iRiSnY
  - Also, SC24 events at <a href="https://cass.community/sc24">https://cass.community/sc24</a>
- Find out more about our software products
  - Individually (catalog under development)
  - Collected as part of the <a href="Extreme-Scale Scientific Software Stack">Extreme-Scale Scientific Software Stack</a> (E4S)
- Reach out to member organizations in your communities of interest
  - Links to member websites: <a href="https://cass.community/about#current-cass-members-and-leadership">https://cass.community/about#current-cass-members-and-leadership</a>
- Participate in CASS Working Groups, building throughout the ecosystem
  - E.g., Metrics, Workforce, User Experience, (Ecosystem) Integration, (Software) Foundations, and more!
- Join CASS and help us reach a larger portion of the scientific software ecosystem!

https://cass.community
cass-steering-committee@email.ornl.gov