

HiPES - the 2nd Workshop on High-Performance eScience Tools and Applications

Call For Papers

The 2nd Workshop on High-Performance eScience (HiPES) aims to bring together experts from academia, industry, and government organizations to discuss the latest developments in this rapidly evolving field and explore emerging trends, challenges, and opportunities within the framework of tools and applications.

The HiPES 2025 workshop will be held on August 25th or 26th (to be defined) with the EuroPar 2025 conference in Dresden, Germany. All papers accepted to HiPES 2025 will be published in a revised form in a special Euro-Par Workshop Volume in the Lecture Notes in Computer Science (LNCS) series after the Euro-Par conference.

The workshop is designed for researchers, practitioners, and students interested in high-performance computing, science, and interdisciplinary research. Participants from academia, industry, government labs, and nonprofit organizations are encouraged to attend and contribute to the vibrant discussions and collaborations. This workshop is part of the dissemination activities of the DAGOnCAPIO (<https://www.dagoncapiouniparthenope.org/>), GLOWPP (<https://www.glowpp-project.org/>), and Hi-WeFAI projects PNNR.

We invite submissions of original research contributions, case studies, and innovative applications in the following areas (but not limited to):

- High-performance computing (HPC) techniques and architectures for eScience
- Languages, paradigms, and tools for scientific workflows
- Scalable and efficient scientific workflows orchestration for eScience
- Optimization techniques for parallel and distributed computing
- Integration of machine learning and AI with eScience applications

- Big data analytics and visualization in scientific domains
- Cloud computing and edge computing for eScience
- Reproducibility and sustainability in computational research
- Performance evaluation and benchmarking of eScience tools and platforms
- Paradigms and techniques for FAIRness in eScience
- Ad-hoc file systems for I/O intensive eScience applications
- Prospective and retrospective provenance models for large-scale applications
- Security, privacy, and trust models and tools for eScience platforms
- Case studies and success stories of real-world eScience applications

We encourage submissions of full papers describing original research, work-in-progress, or experience reports related to the workshop topics.

Important dates:

Paper submission: May 5

Notification of acceptance: June 23

Camera-ready: July 7

Submission guidelines:

Authors are invited to submit papers electronically through EasyChair. The papers should be submitted in PDF format following the Springer LNCS format (<http://www.springer.com/computer/lncs?SGWID=0-164-6-793341-0>). Paper length must not exceed 12 pages (including references). All submitted manuscripts will be checked for originality by Springer iThenticate (papers that show insufficient originality might be rejected without a review).

Workshop proceedings:

Accepted papers presented at the workshop will be published in a revised form in a special Euro-Par Workshop Volume in the Lecture Notes in Computer Science (LNCS) series after the Euro-Par conference.

Paper submission:

<https://easychair.org/conferences/?conf=europar2025>