## **Workshop Goals**

HPCMS18 focuses on innovative mathematical modeling, parallel algorithms, high-performance computing tools and virtualization. It aims at bringing together different researchers from applied mathematics, computer science, HPC, materials science, hydrology, etc., to address the interdisciplinary issue on multi-physics modeling methods and parallel algorithms. Equally important is to perform simulations efficiently on high-performance computing systems.

## **Topics of Interest**

- Data-driven mathematics and physical modeling for parallel simulations
- Advanced numerical methods
- Material performance simulation and optimization
- Multi-scale and multi-physics simulation
- High-performance MOC for neutron transport
- Advanced Monte Carlo method for neutron transport
- Computational fluid dynamics in thermal hydraulics
- Applied and computational mechanics
- Nuclear fuel performance simuliation
- Performance optimization of virtual reactors
- Deep learning in virtual reactors
- Validation and uncertainty quantification
- Virtual operating environment
- Parallel techniques and hybrid programming
- Performance modeling and auto-tuning methods
- Scalable algorithms and advanced computational techniques
- Collaborative computing models of computation and data
- Interactive models of parallel and distributed systems
- High-performance virtual dataspaces
- Performance of virtual domain data centers

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# **Important Dates**

Abstract Submission: March 1st, 2018 AOE
Paper Submission: March 9th, 2018 AOE
Author Notification: April 9th, 2018 AOE
Camera-Ready Copy: May 1st, 2018 AOE
Workshop Dates: June 12th, 2018 AOE

# **Call for Papers**

Papers should be prepared in the LNCS/CCIS onecolumn page format of the Springer conference paper templates. Full papers are limited to 12-15 pages. Short papers are limited to 6-8 pages.

Please submit your papers in PDF or doc format via the EasyChair conference system:

https://easychair.org/conferences/?conf=hpcms2018

#### More

If you have any questions, please e-mail them to

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See more information about HPCMS 2018 at

http://hpcms18.hpc.gensh.me/







Call for Papers