



# CALL FOR PAPERS

## M&C 2021

International Conference on Mathematics and Computational Methods Applied to Nuclear Science and Engineering

April 11-15, 2021 | Raleigh, North Carolina, USA

### SUBJECT AREAS

1. Deterministic methods for particle transport
2. Monte Carlo and hybrid methods for particle transport
3. Mathematical methods in particle transport theory
4. Massively parallel algorithms and exascale computing
5. Computational fluid dynamics and thermal-hydraulics
6. Multiscale and multiphysics methods
7. Computational methods for reactor physics analysis
8. Stochastic media models
9. Reduced-order models in nuclear science and engineering
10. Modeling and simulations in high energy-density physics, plasma physics, and fusion
11. Computational methods in medical physics
12. Nuclear and atomic data, methods, and theory
13. Uncertainty quantification and sensitivity analysis
14. Data science and machine learning
15. Analytical solution, verification, and numerical methods analysis
16. Computational material science

### APPLICATIONS

- |   |  |
|---|--|
| Physics of nuclear reactors             | Astrophysics                                     |
| Radiation hydrodynamics                 | Atmospheric and climate sciences                 |
| Advanced nuclear reactor systems        | Material science, manufacturing, and fabrication |
| High energy-density physics experiments | Medical physics                                  |
| Nuclear nonproliferation                | AI-driven design, optimization, and discovery    |
| Radiation detection                     | Isotope production                               |
| Fusion energy systems                   |  |

**Submission of Extended Summaries:** ~~Monday, August 3, 2020~~  
Tuesday, September 8, 2020

**Review Notification:** Monday, October 12, 2020

**Full Paper Deadline:** Monday, November 23, 2020

**Paper Template and Authors Instructions:** [mc.ans.org](http://mc.ans.org)

**Submit a Summary:** [ans.org/meetings](http://ans.org/meetings)

**Contact Us:** [mc2021@meetings.ans.org](mailto:mc2021@meetings.ans.org)

