ANS®
CALL FOR PAPERS

International Conference on Mathematics and Computational Methods Applied to Nuclear Science and Engineering 2027 (M&C 2027)

April 18-22, 2027 | Columbus, OH | Hilton Columbus Downtown

SUBMIT A FULL PAPER

https://apps.ans.org/esr/event-mc2027/

PROGRAM SPECIALIST

Isabel Brinker
708-579-8290 | ibrinker@ans.org

EXECUTIVE CHAIRS

General Chair
Dean Wang (OSU)

Honorary Chairs
Barry Ganapol (Retired)
Jim Morel (TAMU)

Technical Program Chairs
Tara Pandya (ORNL)
David Griesheimer (NNL)
Wei Ji (RPI)
Sandra Dulla (Politecnico di Torino)
Deokjung Lee (UNIST)

Assistant Technical Program Chairs
Majdi Radaideh (UM)
Vladimir Sobes (UTK)
Stefano Terlizzi (PSU)

Student Program Chair
Dean Price (MIT)

FULL PAPERS DUE: SEPTEMBER 18, 2026

FULL PAPERS DUE (NO EXTENSIONS)	AUTHOR NOTIFICATION OF ACCEPTANCE	REVISED FULL PAPERS DUE
SEPTEMBER 18, 2026	OCTOBER 28, 2026	DECEMBER 11, 2026

ABOUT THE CONFERENCE

The International Conference on Mathematics and Computational Methods Applied to Nuclear Science and Engineering (M&C 2027) is part of a series of topical meetings organized by the Mathematics and Computation Division of the American Nuclear Society. M&C conferences, held every two years, represent a series of international forums organized and sponsored to bring together worldwide expertise related to nuclear science or technology, including mathematical and computational methods, numerical analysis, computer codes, computer architectures, and benchmarks for computationally solving problems in all disciplines encompassed by the Society.

FORMAT, PRESENTATIONS, AND PUBLISHING

Submit full papers, maximum 10 pages, describing work that is of value to the mathematics and computation community and to nuclear science and energy in general. Papers are presented at the meeting, and presenters are expected to register for the meeting. Papers will be scheduled for either a podium or poster presentation at the discretion of the meeting organizers. In addition, please follow these formatting guidelines:

- Do not include headers, footers, page numbers, bookmarks, text highlighting, or hyperlinks to references, figures, and tables in the text of your paper in your final PDF document.
- For the title of the paper, Capitalize the First Letter of Major Words; do not use all capital letters. Do not use all capital letters for any part of any author's name.
- Enter the names of all authors into the Authors page in the EPSR. List the authors in the same order in which their names appear on the paper. Authors' affiliations should match the affiliation provided on the paper itself. If an author has multiple affiliations, enter the one that should be included in the program and in the meeting proceedings.

All accepted and presented papers will be published in the conference's proceedings. Published papers become the property of ANS. Under no circumstances should a paper be published in any other publication before presentation at the M&C 2027 meeting.

ANS CALL FOR PAPERS

International Conference on Mathematics and Computational Methods Applied to Nuclear Science and Engineering 2027 (M&C 2027)

April 18-22, 2027 | Columbus, OH | Hilton Columbus Downtown

STUDENT-LED PAPERS

We welcome and encourage students to submit papers to this conference. Please ensure that papers for which the Primary Author is a student are identified as such in the yes/no student- status question in the Authors section of the EPSR. Judges will use this information to identify the conference's best student papers, which will receive a cash prize. A "student paper" is a paper whose first author and presenter are a student. A person is considered to be a "student" if they are enrolled as a student while the work is completed and they give the presentation either: (a) while enrolled as a student or (b) within 12 months of the completion of their last degree.

TECHNICAL SESSIONS

1. Deterministic Transport Methods and Applications
2. Monte Carlo Methods and Applications
3. Radiative Transfer Methods
4. High-Performance and GPU Computing
5. Multi-Scale, Multi-Physics Simulations
6. Reactor Physics Analysis Methods
7. Machine Learning and Artificial Intelligence
8. Sensitivity Analysis and Uncertainty Quantification
9. Nuclear Data and Nuclear Data Evaluations
10. Advanced Reactor Design and Analysis
11. Verification, Validation, and Benchmark Experiment Design
12. Mathematical Methods in Nuclear Safeguards and Global Security
13. Computational Fluid Dynamics
14. Computational Methods for Thermal Hydraulics
15. Computational Materials Science
16. High-Energy-Density Physics and Plasma Physics
17. Modeling and Simulation for Fusion Energy Systems
18. Computational Methods in Criticality Safety
19. Special Session on Digital Twins: Methods and Applications
20. Special Session on Generative AI and LLMs for Nuclear Applications
21. Special Session on Quantum Computing for Nuclear Applications
22. Special Session on Computational Methods for Reactor Dynamics and Control
23. Special Session on Computational Methods for Space Nuclear Applications
24. Special Session on Radiation Transport in Stochastic Media