International Conference on Mathematics and Computational Methods Applied to Nuclear Science and Engineering 2025 (M&C 2025)

Elevating Peak Performance

April 27-30, 2025 | Denver, CO | Westin Denver Downtown

CALL FOR PAPERS

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Anil Prinja (UNM)

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Christopher Perfetti (UNM)

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Aaron Olson (SNL)
Sebastian Schunert (Radiant Nuclear)
Xu Wu (NCSU)

Student Program Chair
Miriam Kreher (LANL)

Workshops Chair
Xu Wu (NCSU)

IMPORTANT DEADLINES

NOVEMBER → FULL PAPER DUE: **November 15, 2024**

DECEMBER → FULL PAPERS NOTIFICATION TO AUTHORS: **December 13, 2024**

JANUARY → FINAL FULL PAPERS DUE: **January 10, 2025**

ABOUT THE CONFERENCE

The International Conference on Mathematics and Computational Methods Applied to Nuclear Science and Engineering (M&C 2025) 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.

GUIDELINES

Submit full papers 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. 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 2025 meeting. An ANS copyright form is required for all papers.

FORMAT

We are soliciting full papers with a maximum of 10 pages. Use the provided Word or LaTeX templates. Papers not formatted according to the template will be rejected. Papers exceeding 10 pages will be rejected. If an exception is made and a paper exceeding 10 pages is accepted, page charges are $100/page for p. 11 and above.

Your paper should be submitted in PDF format.

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. Do not save your document as "read only."

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.

SUBMIT A PAPER
https://epsr.ans.org/meeting/?m=424

PROGRAM SPECIALIST
Janet Davis
708-579-8253
jdavis@ans.org

CALL FOR PAPERS

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.

JOURNAL COLLABORATION

All authors will be invited to submit a full-length journal article for a special issue of *Nuclear Science and Engineering* following the conference.

TECHNICAL TRACKS

1. Deterministic Transport Methods and Applications
2. Monte Carlo Methods and Applications
3. Radiative Transfer Methods
4. High-Performance Computing
5. Multi-Scale, Multi-Physics Simulations
6. Machine Learning and Artificial Intelligence
7. Sensitivity Analysis and Uncertainty Quantification
8. Verification, Validation, and Benchmark Experiment Design
9. Nuclear Data and Nuclear Data Evaluations
10. Nuclear Safeguards and Global Security
11. Computational Fluid Dynamics
12. Computational Methods for Thermal Hydraulics
13. Computational Materials Science
14. Computational Biology and Health Physics
15. Advanced Reactor Design and Analysis
16. High-Energy-Density Physics and Plasma Physics
17. Special Session on Fusion Neutronics
18. Special Session on GPU Computing
19. Special Session on Research Activities of the Center for Exascale Monte Carlo Neutron Transport (CEMeNT)
20. Special Session on Stochastic Geometry and Particle Branching Processes
21. Special Session on Adjoint Methods