

MAY 20 - MAY 23, 2024

American University, Washington D.C., USA



The **2024 Annual Modeling and Simulation Conference (ANNSIM'24)** is the annual flagship conference sponsored by The Society for Modeling and Simulation International (SCS), which covers state-of-the-art developments in Modeling & Simulation (M&S). ANNSIM'24 invites original contributions to the theory, methodology, and practice of modeling and simulation in any scientific or engineering discipline. The following is the Call for Paper for one specific track. All tracks are listed at <https://scs.org/annsim/>

### Annual Simulation Symposium (ANSS)

Chairs: Joachim Denil, University of Antwerp, Belgium & Deniz Cetinkaya, Bournemouth University, UK

Modeling and Simulation (M&S) is currently the core of many industrial processes. It is a vital ingredient, since it can support early evaluation and optimization of designs, as well as ongoing verification while changes occur to make sure that the right product is developed with the required quality. However, there are still businesses that must understand that embracing M&S in project development and management is good practice, and this can be done by showing real-world examples of success.

Real-world applications have always been the driving force for the development of M&S theories. For over 50 years, the Annual Simulation Symposium has been a forum to exchange ideas, results, and methods related to real-world theories and applications of M&S for simulation experts in industry, government, and academia.

The purpose of this track is to highlight and advance rigorous experimental and computational practices of M&S devoted to the study of real-world problems. Research on all topics concerning the practice of M&S theories are welcome. Authors are invited to submit original research papers, including case studies and applications.

Recommended topics in the track include, but are not limited to, the following:

- Advances in the field of M&S for implementation purposes
- Application of modeling formalisms into real world applications
- Rigorous comparisons across M&S techniques
- Model checking, formalism-based model debugging, model transformation
- Model-driven and model-based approaches in M&S
- New applications of M&S
- Novel uses of M&S in real world applications
- Application of M&S to co-design, hardware-in-the-loop, co-simulation
- M&S tools: performance analysis, scalability
- M&S of quantum information and quantum algorithms
- Quantum simulators and quantum simulation of physical systems

### SUBMISSIONS

Original, high-quality **technical papers** are solicited for peer review, presentation, and subsequent publication in the conference proceedings if accepted. Technical papers are max 12 pages long with single column format. **Tutorials** and **Ph.D. Colloquium** submissions are 2 pages long. Please visit the Author Kit page to use the templates and review detailed guidance on the content: <https://scs.org/authorskit>.

### ORGANIZING COMMITTEE

General chair: Philippe Giabbanelli (Miami U., USA). Vice General Chair: Istvan David (McMaster U., Canada). Program Chair: Cristina Ruiz-Martin (Carleton U., Canada). Proceedings co-chairs: Román Cárdenas (Universidad Politécnica de Madrid, Spain) & Bentley Oakes (Polytechnique Montreal, Canada). For any question, please contact the general chair at [gjabbapi@miamioh.edu](mailto:gjabbapi@miamioh.edu)

## Important dates

Paper Submission  
Jan 14<sup>th</sup>, 2024

Acceptance Notification  
March 1<sup>st</sup>, 2024

Camera-ready Submission  
March 20<sup>th</sup>, 2024

Conference Program  
April 3<sup>rd</sup>, 2024