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2023

VENUE

The Fort Garry Hotel
Winnipeg, MB, Canada

IMPORTANT DATES

Preliminary Paper Submission Deadline:
February 15, 2023

Notification of Acceptance:
April 15, 2023

Final Paper Submission:
May 15, 2023

Conference Date:
June 28-30, 2023

**IEEE MTT-S INTERNATIONAL
CONFERENCE ON NUMERICAL
ELECTROMAGNETIC AND
MULTIPHYSICS MODELING
AND OPTIMIZATION**



**JUNE 28-30, 2023
WINNIPEG, MB, CANADA**

CALL FOR PAPERS

NEMO2023 (nemo-ieee.org) brings together experts and practitioners of electromagnetic and multiphysics-based modeling, simulation and optimization for RF, microwave and terahertz applications. This conference is an ideal forum to share new ideas on techniques for electromagnetic and multiphysics modeling, propose efficient design algorithms and tools, and anticipate modeling/analysis needs of future technologies and applications. Papers using numerical or multiphysics computational methods in unique ways for microwave component or system analysis are encouraged. Founded by the IEEE Microwave Theory and Techniques Society (MTT-S), NEMO is an annual focal event on electromagnetic- and multiphysics-based computer-aided design (EM-CAD), rotating between Europe, North America and Asia. NEMO2023 aims to stimulate discussion and exploration of “disruptive” technologies of EM-CAD in addition to traditional topics. The conference features an exciting technical program, an industry exhibition and invited talks by internationally recognized experts in electromagnetic and multiphysics modeling and optimization.

PAPER SUBMISSION

1. **Full paper, 3-4 page in length, presentation and publication in IEEE Xplore.**
2. **Abstract, 1 page, presentation only**

Authors must adhere to the format provided in the conference website.

CONFERENCE TOPICS

Authors are cordially invited to submit papers in all areas of electromagnetic modeling, analysis and optimization, including but not limited to:

- ▶ **Computational electromagnetics**
- ▶ **Computation multiphysics and modeling**
- ▶ **Analytical and semi-analytical modeling**
- ▶ **Integral equation methods**
- ▶ **Finite difference methods**
- ▶ **Finite element methods**
- ▶ **Hybrid modeling techniques**
- ▶ **Frequency-domain methods**
- ▶ **Time-domain methods**
- ▶ **High-frequency methods**
- ▶ **Multi-scale modeling techniques**
- ▶ **Large-scale problems**
- ▶ **Parallel computing**
- ▶ **Computer-aided design and techniques**
- ▶ **Cognition-aided design**
- ▶ **Modeling of active devices and circuits**
- ▶ **Evolutionary classical optimization techniques**
- ▶ **Space mapping methodologies**
- ▶ **Medical image signal processing techniques**
- ▶ **Inverse electromagnetic problems**
- ▶ **Fifth-generation mobile system analysis and modeling**
- ▶ **Modeling of IC packages and interconnections**
- ▶ **Signal and power integrity optimization**
- ▶ **Modeling of biological effects**
- ▶ **Modeling of electro/optical devices**
- ▶ **Terahertz circuit and modeling**
- ▶ **New materials and nanostructures modeling**
- ▶ **New and emerging areas**
- ▶ **Machine learning and AI methods**
- ▶ **Quantum computing**

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