

IEEE COMPEL 2023

June 25 – 28

University of Michigan in Ann Arbor

<https://ieee-compel.org/>



This workshop brings together researchers, engineers and students from academia and industry for an interactive discussion on the latest advances in modeling, simulation, analysis, and control of power electronic devices, circuits, and systems.

COMPEL 2023 places special emphasis on **Control, Modeling, Design, Optimization, Monitoring, Estimation, and Simulation of Power Electronics and Systems**. Workshop themes include (but are not limited to):

- **Modeling:** modeling of devices and components in power converters and converter-based power systems including multi-physics modeling, small- / large-signal modeling, stability, and power quality analysis.
- **Control of Power Electronics:** novel control methods, techniques, and practical implementation.
- **Power Electronics Reliability:** reliability assessment techniques and methods, reliability modeling, failure mechanism and analysis, design for reliability and robustness, condition monitoring, prognostics and diagnostics.
- **Power Converter Topologies:** Novel converter topologies, practical implementation challenges.
- **Passive and Active Components:** innovative materials, design, and analysis of semiconductor components, inductors, and capacitors.
- **Design, Optimization and Simulation Tools:** design methodologies for power electronic converters, multi-objective optimization, hardware-in-the-loop (HIL), real-time simulation and rapid prototyping.
- **Education Innovation:** innovative teaching methodologies for power electronics.
- **Application Themes:** high frequency and very high frequency; modular, reconfigurable, and distributed; energy storage; transportation, mobility, and autonomous vehicles; robotics; Internet of Things

Preparation of Submissions: Prospective authors should submit a digest not exceeding five single-column double-spaced pages, including references, in PDF format. Information about the paper, including title, topic of interest, authors' names, affiliations, complete mailing addresses, telephone and e-mail addresses of the corresponding author, and a 100-word abstract must be provided in the submission system. No indication of authors' names or affiliation should be included in the 5-page digest. Further details will be posted on <https://ieee-compel.org/>

General inquiries/local committee: ece-compel2023-info@umich.edu

General chair: Al-Thaddeus Avestruz, avestruz@umich.edu

Important dates and deadlines:

Digest submission deadline: March 20, 2023

Notification of acceptance: April 20, 2023

Early registration closes: May 12, 2023

Late registration: May 13 – June 23, 2023

Final paper submission deadline: June 19, 2023