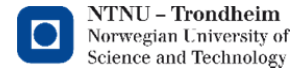


IEEE COMPEL 2016



The Norwegian University of Science and Technology – NTNU Trondheim, Norway, 27 – 30 June, 2016 <http://ieee-compel.org/>

The **IEEE Power Electronics Society** announces the **Seventeenth IEEE Workshop on Control and Modeling for Power Electronics, COMPEL 2016**. This workshop brings together researchers, engineers and students from academia, industry, and government for interactive discussions on the latest advances in modeling, simulation, analysis, and control of power electronic devices, circuits and systems of small and large scales.

Special emphasis of COMPEL 2016 will be on stability assessment of power electronics dominated systems and impact of converter control strategies on system stability. Workshop themes include (not limited to):

- **Modeling and simulation:** Modeling of devices and components in power converter systems, multi-domain and multi-level modeling (electro-thermal models, multi-physics models, integration of simulation models with different detailing levels etc.), efficient modeling and simulation of multi-level converters, numerical methods for simulation of complex systems, accurate converter models for large scale system studies
- **Control of Power Converters:** Linear and nonlinear control algorithms for AC-DC, DC-DC and AC-AC converters, digital control and discrete time controller analysis, implementation techniques (DSP, FPGA, etc.), control of Inductive Power Transfer systems, control of ultra-high switching frequency converters
- **Hybrid systems and power management:** Design and control of power converter in hybrid transportation system (electric vehicles, trains, ships and aircraft systems), power management techniques for power supply systems with energy storage (vehicles, telecommunication, computation systems, grid scale energy storage etc.), wireless power transfer, energy storage management and operation techniques, systems with power ICs
- **Design, Optimization and Simulation Tools:** Design methodologies for power electronic converters, reliability-optimized design approaches, multi-domain and multi-objective optimization of power converter system design, optimization-oriented simulations, hardware-in-the-Loop (HIL) testing and simulation, real-time simulation and rapid prototyping
- **Stability of power electronics systems:** Stability analysis of power systems dominated by power converters, stability of integrated ac and dc power systems, controller interaction and stability problems in converter dominated systems, representation of power converter stability properties in power system stability studies, power system compensation and damping of power system resonances, constant power load instability effects in dc and ac systems, non-linear instability phenomena in power electronic converters (limit cycles, bifurcations, chaos)
- **Education & Innovation:** Innovative teaching methodologies, Smart Grid Laboratory driven research and innovation, virtual and interactive laboratories in education, multimedia tools and interactive simulations

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. Further details will be posted on the website: <http://www.ieee-compel.org>

Venue:

COMPEL 2016 will be held at the Gløshaugen campus of The Norwegian University of Science and Technology in Trondheim, Norway, which is within walking distance of the city center of Trondheim.

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Important Deadlines:

Digest Submission: 27 February, 2016
Notification of Acceptance: 4 April, 2016
Early Registration: 4 April-15 May, 2016
Late Registration: 16 May-25 June, 2016
Submission of Full Papers: 24 June 2016

Workshop Schedule:

Day 1: Monday (27 June): Registration, Tutorials, Welcome Reception
Day 2: Tuesday (28 June): Paper Sessions
Day 3: Wednesday (29 June): Paper & Poster Sessions
Day 4: Thursday (30 June): Paper Sessions, Awards Dinner
Day 5: Friday (1 July): Optional post-conference tour