



ICEM 2024, Torino, September 1-4 2024

Special Session on

Emerging Multi-Port Electrical Machines and Systems

Organized and co-chaired by

- Yixiao Luo Huazhong University of Science and Technology luoyx@hust.edu.cn
- Jincheng Yu

 Harbin Institute of Technology (Shenzhen) yujincheng@hit.edu.cn

Call for Papers

Distinct from the conventional machines with only one electrical and one mechanical port, electric machines featuring multiple electrical/mechanical ports (the so-called multiport electric machines) provide a compact, flexible, and highly efficient manner to convert and/or transfer energies among different ports. Further investigation on the design and control of the multiport electric machines are required to enhance the system performance. The aim of this special session is to share and promote recent research advances in the design, control, applications of high performance multiport electric machines.

Topics of interest include, but are not limited to:

- Advanced control of multiphase machines
- Fault diagnosis and tolerant control of multiphase machines
- Electromagnetic analysis and optimization of multiport electric machines
- Applications of multiport machines in industry, such as onboard charger, ECVT etc..
- Novel converter topology for multiport electric machines
- Design of integrated drive for multiport electric machines

Submission of papers: paper submission follows the rules of regular papers. All the instructions for paper submission are included in the conference website https://icem.cc/2024