

# Annual Conference of the IEEE Industrial Electronics Society (IECON 2021)

## Special Session on

### “Advanced Electrical Machines and Drives for Transportation Electrification”

#### Organized by

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## Call for Papers

Theme:

With the increasing concern of energy saving and environmental protection, transportation electrification has become an important trend around the world. Electrical machines and drives, as the key components of electrified transportation, are exposed to new challenges of higher power density, higher efficiency, lower noise and vibration, improved reliability, etc. This Special Session is devoted to the latest developments of advanced electrical machines and drives with applications on electric vehicles, vessels and more electric aircrafts. The technical progresses involved in novel machine topologies, design and modelling, multi-physics optimization, and advanced control strategies are all welcomed from both academia and industry.

Topics of interest include, but are not limited to:

- a) Permanent magnet machines
- b) Reluctance machines
- c) High-speed high-power density traction motors
- d) High-torque density direct-drive machines
- e) Flux-modulated machines

- f) Emerging machine topologies for transportation electrification
- g) Advanced control strategies
- h) Multi-objective and multi-physics design optimization
- i) Noise and vibration analysis and reduction
- j) Advanced thermal analysis and management

**Submissions Procedure:** All the instructions for paper submission are included in the conference website: <https://attend.ieee.org/iecon-2021/>

**Deadlines:**

Full paper submission:	June 25, 2021
Paper acceptance notification:	July 30, 2021
Camera-ready paper submission:	Aug. 27, 2021