



**IEEE INTERNATIONAL SYMPOSIUM ON INDUSTRIAL ELECTRONICS ISIE'18  
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**Special Session on**

**Power Electronics and Electric Machines for Aerospace Applications**

*Organized by*

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***Call for Papers***

The constant pursuit towards a higher efficiency and a simplified maintenance has pushed designers towards the increase of the electrical subsystems on-board the modern aircrafts. This framework takes the name of the More Electric Aircraft (MEA) and the interest of academia and industry has recently spiked also thanks the introduction of new aircrafts, like the Boeing 787, that feature a massive integration of electrical systems.

This Special Session targets the on-board micro-grid, its stability issues, its possible architectures (AC/DC multi-bus fixed or variable frequency), new power converter topologies and the electrical machine design.

Topics of interest include, but are not limited to:

- Smart-grid technologies for the More Electric Aircraft
- Novel architectures for the Electrical Power Distribution System
- Constant Power Load (CPL) stability issues
- Multi-port architectures for the Electrical Power Distribution System
- Multi-objective optimization of the energy consumption
- Fuel Cell - Battery - Supercapacitor applications to the Electrical Power Distribution System
- Starter/Generator control and design
- Hardware in the Loop (HIL) testing for the More Electric Aircraft
- Electric Machine design for aerospace applications
- Reliability of electric machines and drives for aerospace applications

All the instructions for paper submission are included in the conference website: <http://www.ieee-isie2018.org>