

The 46th Annual Conference of the IEEE Industrial Electronics Society



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Special Session on

<u>"Electrical power systems for the more electric aircraft"</u> Organized by

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Call for Papers

The more-electric aircraft (MEA) concept is one of the major trends in modern aerospace engineering aiming for reducing the overall aircraft weight, operation cost and environmental impact. Electrical systems are employed to replace existing hydraulic, pneumatic and mechanical actuators. As a consequence, the onboard installed electrical power increases significantly and this results in challenges in the design of the aircraft electrical power systems (EPS). The aim of the proposed special session is to collect and disseminate the latest research and advanced technologies in the field of power electronics, electrical machines and power systems developed for the More Electric Aircraft applications.

Topics of interest include, but are not limited to:

- Novel architectures for electrical power distribution systems
- Modeling and simulation of aircraft power systems
- Constant Power Load (CPL) stability issues and stabilization techniques
- Multi-port power converters topologies
- New topologies for power converters in aerospace applications
- · Energy storage systems for the more electric aircraft
- Hardware in the Loop (HIL) testing for the more electric aircraft
- Electric machines for aerospace applications
- Reliability of electric machines and drives for aerospace applications
- Energy management of aircraft power systems