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**Special Session on**

**“Control of multiphase and special machines for hybrid and  
electric mobility”**

**Organized by**

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## **Call for Papers**

The scope of this Special Session concerns all the control strategies for multiphase drives and special machines, either in healthy mode or in faulty one, applied to electric mobility. Fault detection and localization will be also investigated in order to reconfigure the control algorithm. Increasing fault tolerant capability and compactness for embed systems, such as motor brain for example, leads to the necessary of self-sensing control developing, especially for multiphase drives.

Topics of interest include, but are not limited to:

- Fault-tolerant control strategies for multiphase and special drives under healthy and faulty conditions for industrial applications
- Integrated machines and challenges (EMC, thermal problem, etc. ) associated to integrated machines

Control strategies of multiphase and special drives under constraint such as the limit of voltage and current

- Multiphase power electronics topologies
- Fault diagnostic analysis and fault detection
- Space vector modulation technique
- Sensorless control for multiphase drives
- Optimal control of special machines, including three phase ones
- Efficiency control of the drives taking into account driving cycles