Curriculum Vitae

Michele PASTORELLI

Laurea and Ph.D. degrees in Electrical Engineering from the Politecnico di Torino, Italy, in 1987 and 1992, respectively.

He is Full Professor of electrical machines and drives since November 2006, responsible for the course of Electrical Drives in the Electrical Engineering master's degree.

He has authored more than 140 papers published in technical journals and conference proceedings. His scientific activity concerns:

- Power electronics: control and modulation strategies for high efficiency inverters to be used for air and water treatments
- High efficiency synchronous reluctance servo drives for both industrial, commercial and residential applications. Important achievement in this sector is the definition of an automatic measurement procedure for the acquisition of the magnetic model to be used in sensorless control schemes (i.e. fan, compressors for air conditioning and refrigerators). Design and sensorless control of PMASR (Permanent Magnet Synchronous Reluctance) motors.
- Electrical drive for automotive and specifically for city cars power train.
- Study of the energetic behaviour of soft magnetic materials under non sinusoidal supply by direct measurement of the losses using innovative instruments suited for modulated supply
- Analysis of energy consumptions (electric power and heat from district heating network) for commercial and residential buildings. Local coordinator of the EU funded project EMPOWERING.
- Electric power production from sea waves by an inertial sea wave energy converter coupled to an electrical drive (synchronous generator and power electronic converter for connections to the mains).

He has been involved as a Consultant in research contracts with foreign and Italian companies. He has been in charge of several national research projects funded by the Italian Research Ministry in the field of ac drives.

Chairman of the Local Organizing Committee di INTELEC 2018 – Torino.

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