

CURRICULUM VITAE

of

Paolo Bolognesi

Paolo Bolognesi graduated in Electrical Engineering with full marks cum laude in 1995 at the University of Pisa. He obtained then his Ph.D. with focus on power electronics from the same University in 1999. After a period spent as Research Fellow, in 2001 he joined the University of Pisa as a Senior Researcher and Appointed Professor in Electric Machines, Power Electronics and Electrical Drives; such position was confirmed in 2004.

Teaching Activities

Since academic year 2002/3 he was annually appointed to teach courses in the M.Sc. degree in Electrical Engineering: Dynamics of Electric Machines and Electrical Drives 2, later on relabelled Dynamics and Control of Electric Machines, then Design of Electrical Devices, finally Power Electronics (in English). He was also invited to give seminar lectures abroad. He was official supervisor of 4 Ph.D. students who joined the R&D offices of primary companies in the electrical industry; presently he is supervising a PhD student based at the University of Nottingham (UK) and another based at the University of Pisa. Presently he is also the local referee for the MSCA Doctoral Network "HIPO"; in this framework he will be supervising other 2 PhD students based at the University of Pisa and at the University of Aalborg (DK) respectively. He also supervised or informally mentored many other PhD and M.Sc. students.

Academic and Applied Research Activities

He developed research activities concerning different topics, also in the frame work of research projects and contracts that he also contributed to manage; in particular:

- * modulation techniques for converters based on local and global spectral approximation
- * high power quality converters for the control of AC resistive loads
- * converters for 1 phase to 3 phase extension with active filter function
- * magnetic components for static converters
- * electromechanical actuators for specific applications
- * linear brushless electric machines featuring low inertia
- * axial flux modular reluctance machines for low speed applications
- * multi degree of freedom machines, in particular brushless rotary linear
- * generalized analytical modeling of electromagnetomechanical devices
- * generalized variables transformation for analysis of electromagnetomechanical devices
- * generalized magnetic analysis of long drum type rotary machines
- * generalized modeling and optimized analysis of machines featuring cage winding
- * optimal positioning of cage bars in synchronous and induction machines
- * DC and inverted synchronous machines equipped with hybrid excitation
- * homopolar machines
- * magnetic bearings and bearingless machines
- * modeling and energetic functional analysis of hybrid and electric vehicles

He promoted and supervised several collaborations with academic institutions, in particular the University of Nottingham (UK) and the University of Modena e Reggio Emilia, as well as with R&D offices of several companies, including ABB, GE, Ansaldo Energia, ASI Nidec etc.

He authored over 100 international publications and patents in his fields of competence.

Management Activities

He created and managed the first website of the Degrees in Electrical Engineering at the University of Pisa. He acted as representative of the Researchers in the Board of the Department. Since 2012 he was appointed to coordinate and supervise the activities related to logistic reorganization, refurbishment and maintenance of the Department.