

CURRICULUM VITAE

of
Luca Sani

He received the M.Sc. degree with honours in November 1996 in Electrical Engineering from University of Pisa; his master thesis concerned the study of an active control of a pantograph for high-speed train. In 1997 he joined the Ph.D. courses in Automation and Robotics, at the University of Pisa. He received the Ph.D. degree discussing the thesis "Identification on continuous domain. The modulating function approach". From January 2004 to December 2010 he was with the Department of Electrical System and Automation (DSEA) as Assistant Professor in the Electrical Machines, Power Electronics and Electrical Drives group. From January 2011 to September 2012 he was with the Department of Energy and System Engineering (DESE). Since October 2012 he has been with the Department of Energy, Systems, Territory and Constructions Engineering (DESTEC). He is currently teaching Control of electric Machines at the students of Electrical Engineering. He is a member of the IEEE (Institute of Electrical and Electronics Engineers).

He has published more than 90 technical papers in conference proceedings and technical journals and holds three international patents. His research activity is focused at the study of electrical machines and power converters, through theoretical models and by using simulation FEM tools (Magnet, Ansys) and 3D CAD (Solidworks). Recent research topics include:

- brushless electrical machines for industrial applications and for the traction of hybrid vehicles;
- distribution transformers with amorphous core;
- high speed brushless generators for turbocharger systems;
- electromagnetic launchers;
- axial flux brushless motors with two rotors;
- induction heating systems;

The activities have been carried out in the context of publicly funded research projects including PRIN, POR CREO Tuscany Region (Projects FAT, TANC, SCY, SY) and European Projects (ENFICA) and by 3rd party industries (Acea, DAB Pumps, EEI, Enel, Fosber, Imer International, KATO-Imer, Leonardo Spa, Newton Trasformatori, Pramac, Sitem Costruzione motori, Tesmec, WAM).