Luca PAPINI, Ph.D.

Associate Professor in Electrical Engineering

Luca Papini received the M.Eng. degree (110 cum laude) in Electrical Engineering from the University of Pisa, Italy, in 2011 and the Ph.D. in Electrical and Electronic Engineering in 2018 from the University of Nottingham, UK, in 2018.

From 2013 he was Assistant Researcher in the PEMC group at the University of Nottingham, collaborating at EU projects (HEMAS, GreenTaxii) and industrial projects related with electrification in the civil aviation (Airbus, Siemens, Rolls Royce), transportation (Cummins) and energy (ABB) sectors. In 2014 he has been Visiting Researcher at the National Technical University of Athens and in 2018 Visiting Researcher at Aalto University. From 2018 to 2019 was Research Fellow at the University of Nottingham focusing on system level electrification in civil aircraft. In 2018 he won the JSPS Fellowship at the Shizuoka University working on high speed bearingless electrical machine. I have done seminars in various Japanese universities (Tokyo Institute of Technology, Kyoto University, Tokyo Marine Institute) on my research activities related with magnetic levitation in electrical machines. Between April 2019 and October 2019 he was researcher (assegno di ricerca) at the University of Pisa and from October 2019 to September 2022 hr covered the position of RTD-B at the University of Pisa, Department of Energy, System, Territory and Construction (DESTeC). Since October 2022 he is Associate Professor of Electrical Machines and Drives at the University of Pisa, responsible of the module “Electrical Machines and Drives for Energy, Transportation and Industry” (in English), 3rd year of the Bachelor degree in Energy Engineering at the University of Pisa.

He is co-author of more than 50 peers reviews international publications and he is reviewer for IEEE journals (Transaction Industrial Electronics, Transaction Industry Applications, Transaction in Transportation Electrification, Transaction on Magnetics, Transaction in Power Electronics) and conferences. He has been awarded the “Best Paper Award” at the 2022 ICEM conference.

His current research interests includes multi-physics (electromagnetic, thermal, mechanical and rotor-dynamic) modelling and analysis of electrical machines and drives, analytical modelling and design of unconventional electrical machines, high speed and high power density electrical machines, levitating systems, bearingless machines, advanced control of electrical machines for renewable energy, transportation (mainly aviation and on ground vehicles) and industry (automation of industrial processes).