Author: Emanuele Fedele, University of Naples Federico II, Naples, Italy

Papers to be presented at ICSMARTGRID 24:

- ID 45: "Bearing Fault Detectability in Squirrel Cage Induction Generator at Different Load Levels via Vibration Envelope Analysis"
- ID 46: "Compact Integration of Battery Storage System for a Micro Wind Turbine System"

Biography:



Dr. Emanuele Fedele received the Ph.D. degree in Information Technology and Electrical Engineering from the University of Naples Federico II, Italy, under the "National Operational Program (PON) — Research and Innovation 2014-2020" grant, with a thesis on the integration and control of non-conventional multi-port traction converters for rolling stock vehicles with onboard energy storage and fuel cell systems. During his Ph.D, he has collaborated with the Department of Electronic, Electrical and Systems Engineering at the University of Birmingham, UK, and with Hitachi Rail Italy S.p.A. company in Naples, Italy. His research interests encompass modelling, control, and integration of energy storage systems, power electronic

converters, and electrical drives with application to multi-source propulsion systems in railway and aircraft transportation, wind energy conversion systems, and energy storage integration. He currently holds a position as Research Fellow at the Department of Electrical Engineering and Information Technology, University of Naples Federico II, Italy, where he is involved in lectures and research activities on power electronics and electrical machines for transportation and renewable energy production.