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Stefano Bracco is **Associate Professor of Electrical Power Systems** at the Department of Electrical, Electronic and Telecommunications Engineering and Naval Architecture (DITEN) of the **University of Genoa**, **Italy**.

He currently teaches five courses at the University of Genoa:

- "Electrical installations" (Bachelor degree in Electrical Engineering)
- "Power systems simulation and optimization" (Master degree in Energy Engineering)
- "Power systems management" (Master degree in Energy Engineering)
- "Critical energy infrastructures modelling and simulation" (Master degree in Engineering for Natural Risk Management)
- "Energy transition and power systems management" (Master degree in Management for Energy and Environmental Transition)

Since 2018, he has been teaching "Optimal design and operation of microgrids" as part of the Specialised Master in Renewable Energies organised by the École Nationale Supérieure des Mines de Paris in Sophia Antipolis (France). In 2021 he was a lecturer in "Smart grids and electric mobility in power networks" at the University of León (Spain). In 2019 he was the Director of the specialization course on "Electric mobility systems for the smart city" organized by the University of Genoa in collaboration with the Italian association MOTUS-E, and in 2022 he was the director of the International ALPGRIDS Microgrid Summer School held as part of the European ALPGRIDS Interreg project. He has been the supervisor of four PhD students in Sciences and Technologies for Electrical Engineering and Complex Systems for Mobility at the University of Genova, one of them under a cotutelle agreement with the University of Sevilla. He has supervised/co-supervised more than 90 B.Sc. and M.Sc. engineering theses at the University of Genoa.

His main research activities include:

- Optimal design and management of Renewable Energy Communities and Sustainable Urban Districts
- Optimal design and operation of Microgrids and Nanogrids
- Smart charging of electric vehicles and V2X technologies
- Analysis of the impact of electric vehicle charging infrastructures on power networks
- Distributed generation power plants and storage systems modelling and simulation
- Integration of renewable power plants in distribution networks and smart buildings

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The above activities are developed through joint research projects with other universities and companies, such as the Polytechnic University of Zurich, the University of León, the University of Sevilla, the Politecnico di Milano, FIAMM SpA, Ansaldo Energia SpA, ENEA, Fera srl.

From 2019 to 2022 he was the pilot coordinator of the study developed to design a Positive Energy District in the Legino area of the Savona municipality within the European Interreg ALPGRIDS project.

From 2018 to 2019 he has been the scientific coordinator of the agreement between the Provveditorato Interregionale alle OO.PP. Piemonte - Valle d'Aosta - Liguria and the University of Genoa, whose main objective was to develop an energy efficiency project for the courthouse of Savona.

From 2020 to 2021 he was in charge of the research project "Mathematical models and optimization tools for the design of multi-vector energy systems in local energy communities" commissioned by ENEA.

From 2021 to 2022 he has been the scientific coordinator of a research project developed with Ansaldo Energia SpA on the integration of small-scale cogeneration units and electric vehicle charging infrastructures in the residential and tertiary sectors.

Since 2021 he has been the representative of the Framework Agreement between the University of Genoa and RINA SpA company, with the aim of developing joint research activities, teaching and tutoring programmes on the challenging topics of the energy transition and blue economy.

He has been a speaker at national and international conferences, where he has organized several special sessions, and a member of technical committees of international conferences. He is currently Journal Editor of the Electrical Engineering section of the Journal of Power Technologies, member of the Advisory Editorial Board of Sustainable Energy Developments books published by CRC Press - Taylor and Francis Group, member of the Editorial Board of Energies and Associate Editor of Frontiers in Energy Research. He is the author of about 100 scientific papers and 2 international books.

Main publications:

- G. Piazza, S. Bracco, F. Delfino, M. Di Somma, G. Graditi, "Impact of electric mobility on the design of renewable energy collective self-consumers," in Sustainable Energy, Grids and Networks, vol. 33, 100963, 2023.
- M. de Simón-Martín, S. Bracco, G. Piazza, L.C. Pagnini, A. González-Martínez, F. Delfino, "Levelized Cost of Energy in Sustainable Energy Communities. A Systematic Approach for Multi-Vector Energy Systems," SpringerBriefs in Applied Sciences and Technology, Springer Cham, 2022.

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- G. Piazza, S. Bracco, F. Delfino, S.Siri, “Optimal design of electric mobility services for a Local Energy Community,” in Sustainable Energy, Grids and Networks, vol. 26, 100440, 2021.
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- S. Bracco, G. Dentici, S. Siri, “DESOD: a mathematical programming tool to optimally design a distributed energy system,” in Energy, vol. 100, pp. 298-309, 2016.
- S. Bracco, M. Fresia, “Electric vehicle fleet management for a prosumer building with renewable generation,” in Energies, vol. 16, issue 20, art. no. 7213, 2023.
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- F. Delfino, R. Procopio, M. Rossi, S. Bracco, M. Brignone, M. Robba, “Microgrid Design and Operation-Toward Smart Energy in Cities,” Norwood, Artech House, 2018.

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Publications: https://www.scopus.com/authid/detail.uri?authorId=15049159900

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