Augusto Della Torre

Augusto Della Torre, born in Sondrio on 30th May 1985, is an Associate Professor at the Energy Department of Politecnico di Milano. He is currently lecturer for the courses “Fluid Machines and Energy System” (BSc in Mechanical Engineering) and “Modeling of Automotive Propulsion Systems” (MSc in Energy Engineering).

He graduated in Mechanical Engineering at Politecnico di Milano in 2009, then he achieved the Ph.D in Energy and Nuclear Science and Technology in 2013, discussing a thesis entitled “Multi-Scale CFD Modeling of Intake and Exhaust Systems for Internal Combustion Engines”. As part of the Ph.D, in 2012, he spent a research period at the University of Exeter (UK), working in the research group of prof. Gavin Tabor. From 2013 he is working at the Department of Energy of Politecnico di Milano: post-doc research fellow (2013-2015), junior researcher (RTDa, 2015-2018), senior researcher (RTDb, 2018-2022), associate professor (2022-present).

His research activity is focused on the thermo-fluid dynamic modelling of internal combustion engines, with particular interest to the simulation of unsteady flows in intake and exhaust systems. He developed models for the simulation and the optimization of the acoustic properties of silencers at different detail levels, ranging from fast quasi-3D approaches to detailed CFD models. Moreover, his research activity includes: the CFD modelling of reacting flows in the after-treatment systems; the study and the optimization of innovative substrates for catalytic devices; the CFD modelling of gas exchange process; the simulation of the engine thermal management and waste-heat recovery systems. He is author of more than 60 peer-reviewed publications on international journals and conferences. Moreover he has been actively involved in different research projects funded by private companies, European Union and Italian Government.