Curriculum Vitae of Francesco Casella

Francesco Casella was born in Cremona, Italy in 1969. He got his master's degree in Electronic Engineering cum laude in 1994 at Politecnico di Milano and his PhD in Automation and Information Engineering also at Politecnico in 1999, receiving the Chorafas prize ex-aequo for the best PhD dissertation in Automation at Politecnico in that year. He is currently Associate Professor at the Dipartimento di Elettronica, Informazione e Bioingegneria (DEIB) of Politecnico di Milano, where he teaches courses in Control Systems and Advanced Process Control for the master's degrees in Energy Engineering and Automation and Control Engineering. He has been also teaching courses on object-oriented modelling and simulation to PhD students every three years since 2006.

Francesco Casella has authored and co-authored over 35 papers in international jounals and 100 papers in international conference proceedings, and holds a patent in the field of refrigeration system control. His main research interests are modelling, simulation, and control of thermal power generation systems and of thermo-hydraulic systems in general, as well as methods and tools for system-level, object-oriented, equation-based modelling and simulation, applied to engineering systems in general. In this field, he has collaborated with various research group at national and international level from various research institutions: Politecnico di Torino, TU Delft, Lund University, Universidad Nacional de Educacion a Distancia, Universidad de Rosario, FH Bielefeld. During the winter semester 2006-2007 he was a guest of prof. Piero Colonna's research group at Process & Energy Department of TU Delft.

Francesco Casella has worked in numerous research and consulting collaborations with industrial companies, such as ABB, Ariston Thermo, CESI, EDF, ENI, General Electric, LU-VE, SNAM, RTE, mostly in the field of modelling and control of energy and thermo-fluid systems. Between 2015 and 2021 he was responsible at DEIB of a research unit involved in three EU-funded Horizon 2020 and RFCS projects (PreFlexMS, FlexiCaL, sCO2Flex), all dealing with the study of the control and flexible operation of innovative thermal power generation systems. He is co-founder and partner of Dynamica s.r.l., an engineering consultancy company working in the field of model-based control system design.

Francesco Casella is an active member of the Modelica community. He is the Director of the Open Source Modelica Consortium, which develops the OpenModelica software tool, and is a member of the Board of the Modelica Association. He was the general chair of the 7th International Modelica Conference 2009 in Como, the programme chair of the 12th International Modelica Conference 2017 in Prague, and organized the 7th International Workshop on Equation-Based, Object-Oriented Methods and Tools (EOOLT) in Milan in 2016.