Dr. Matteo Bucci

Bio

Matteo Bucci is Associate Professor of Nuclear Science and Engineering at MIT. He has joined the MIT faculty in 2016, where he teaches undergraduate and graduate courses in nuclear reactor engineering and design, and two-phase heat transfer. His thermal-hydraulics group at MIT investigates heat transfer mechanisms in nuclear reactors, surfaces engineering techniques to enhance two-phase heat transfer, and is developing machine learning tools to conduct autonomous heat transfer experiments. His group also develops and uses advanced diagnostics, such as high-speed infrared thermometry and phase-detection, and post-processing algorithms to perform unique heat transfer experiments. Matteo has published over 40 articles in the areas of two-phase flow and heat transfer, and surface engineering technology. For his research work and his teaching, he won several awards, among which the MIT Ruth and Joel Spira Award for Excellence in Teaching (2020), ANS/PAI Outstanding Faculty Award (2018), the UIT-Fluent Award (2006), the European Nuclear Education Network Award (2010), and the 2012 ANS Thermal-Hydraulics Division Best Paper Award (2012). Matteo is Editor of Applied Thermal Engineering and a consultant for the nuclear industry.

Years beyond PhD

Twelve Years

Research area

Heat transfer/thermal-hydraulics

School of employment

Massachusetts Institute of Technology

Educational background (field of degrees)

Ph.D. University of Pisa, Pisa, Italy, Industrial and Nuclear Security (Nuclear Safety), 2009
M.Sc. University of Pisa, Pisa, Italy, Nuclear Engineering, 2005