

## **Michele Grossi**

He Takes part in the Quantum Computing R&D activities in CERN openlab as part of the CERN Quantum Technology Initiative. He contributes to the creation of a quantum computing simulation platform composed of classical hardware, specialized quantum simulators and remotely-accessed quantum hardware on which quantum version of ML/DL algorithms used in HEP can be developed and tested. He is focusing on identification of use cases, development of algorithms, optimize simulators on different hardware and support doctoral students in the R&D projects. Michele has been an IBM Quantum Technical Ambassador and Qiskit Advocate. He is a qualified Innovation Manager. Born in 1989, he joined IBM in 2015, then he got his industrial PhD in Physics from the University of Pavia and IBM. His core competence is problem solving with a focus on innovation and technology. During his career in IBM he is always been involved in several technological projects and joint educational programs with Italian universities. He joined IBM under IBM Services where he had the opportunity to work for a period in IBM UK. He faced different working environment where building new working relationships to foster knowledge and work experience, in particular as facilitator between account teams, customers and third party vendors. In fall 2017 he started a parallel career growth as an Industrial PhD student in Physics at the University of Pavia (Italy) on high energy physics problem and quantum computing with the role of IT Architect. This dual career path has been a combined high level education journey in collaboration between industry and university to ease skills interchange among the two sectors. It aims at acquiring a deep knowledge in data science and in cutting-edge Quantum Computing, where he is co-author of scientific publications and speaker to conferences. In this area he is developing use case scenario with customer to evaluate up to date technology utilization from machine learning to quantum algorithm proof of concept