



# Quantum Computing @ INFN

## Tuesday, 15 November 2022

### Martedì: Attività INFN II - Aula Specola (09:00 - 10:45)

time	[id] title	presenter
09:00	[16] IBM quantum platforms: a quantum battery perspective	Dr FERRARO, Dario
09:25	[19] Quantum-notebook: a Docker stack for quantum computing	FALABELLA, Antonio PARDI, Silvio
09:50	[18] A Containerized Quantum Application Software Architecture Framework	Dr CRIPPA, Luca
10:15	[10] A generalized eigenvalue problem via a quantum annealer	GNECH, Alex

### Martedì: Attività INFN III - Aula Specola (11:15 - 12:45)

time	[id] title	presenter
11:15	[11] Control Optimization for Parametric Hamiltonians by Pulse Reconstruction	LUCHI, Piero
11:40	[5] Holographic Realization of the Prime Number Quantum Potential	Prof. MUSSARDO, Giuseppe
12:05	[9] Metodi Tensor Networks per teorie di gauge su reticolo	MAGNIFICO, Giuseppe

### Martedì: Attività INFN IV - Aula Specola (14:15 - 16:00)

time	[id] title	presenter
14:15	[13] Ab-initio two-dimensional digital twin for quantum computer benchmarking	PAGANO, Alice
14:40	[17] Use of a Quantum Annealer in optimization problems	FONTANA, Andrea
15:05	[8] Trapped-Ion Quantum Simulation of Collective Neutrino Oscillations	AMITRANO, Valentina
15:30	[12] Long-lived particle Anomaly detection with parameterized quantum circuits	BORDONI, Simone BORDONI, Simone

### Martedì: Attività INFN V e conclusioni - Aula Specola (16:30 - 18:00)

time	[id] title	presenter
16:30	[14] Entanglement entropy production in Quantum Neural Networks	BALLARIN, Marco
16:55	[15] Quantum machine learning for jet classification at LHCb	SESTINI, Lorenzo
17:20	[6] Opening the black box of quantum machine learning	BANCHI, Leonardo
17:45	[24] Conclusioni	