

## Session Program

3-6 Feb 2026



# 3rd Workshop on Quantum Computing @ INFN

## *Quantum Machine Learning*

Auditorium U12 - Guido Martinotti  
Università degli Studi di Milano-Bicocca, Edificio U12, Via Vizzola, 5, 20126 Milano (MI)

# Wednesday 4 February

09:00

## Quantum Machine Learning

Session |

**Location:** Auditorium U12 - Guido Martinotti, Università degli Studi di Milano-Bicocca, Edificio U12, Via Vizzola, 5, 20126 Milano (Italy) | Giagu

09:00–09:20

### Quantum Generative Models for Fragmentation Functions

**Speaker**

Dr Michele Grossi

09:20–09:40

### Quantum Neural Network-enhanced Models For Fast Calorimeter Simulation In ATLAS

**Speaker**

Federico Andrea Guillaume Corchia

09:40–10:00

### Quantum machine learning applications for classification and simulation tasks at the LHCb experiment

**Speaker**

Lorenzo Sestini

10:00–10:20

### Finding the Higgs boson with quantum machine learning

**Speaker**

Eric Ballabene

10:20–10:40

### Boosted Objects in Vector Boson Scattering: from classical to quantum ML prospects

**Speaker**

Fabrizio Napolitano

10:45

11:15

## Quantum Machine Learning

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11:15–11:35

### QChaiTEA: the quantum-inspired machine learning application of the QTEA library

**Speaker**

Alberto Coppi

11:35–11:55

### Sn-based quantum machine learning for multi-object tracking

**Speaker**

Matteo Argenton

11:55–12:15

### Characterization and upgrade of a quantum graph neural network architecture for particle tracking

**Speaker**  
Concezio Bozzi

12:15-12:35 **Ultra-Low-Latency Tree Tensor Network Inference on FPGAs**

**Speaker**  
Lorenzo Borella

12:35-12:55

**FPGA-Accelerated Quantum Circuit Emulation for Efficient QML models Training**

**Speaker**  
Dr Deborah Volpe

13:00

# Thursday 5 February

09:00

## Quantum Machine Learning

Session |

**Location:** Auditorium U12 - Guido Martinotti, Università degli Studi di Milano-Bicocca, Edificio U12, Via Vizzola, 5, 20126 Milano (MI)  
**Co-convenor:** Dr. Andrea Giachero

09:00-09:20

### Optimizing Complex Quantum Systems with Few Measurements

**Speaker**

Leonardo Banchi

09:25-09:45

### Quantum noise modeling through Reinforcement Learning

**Speaker**

Simone Bordoni

09:50-10:10

### Exploring fixed points and eigenstates of quantum systems with reinforcement learning

**Speaker**

María Laura Olivera Atencio

10:15-10:35

### Quantum reinforcement learning in the presence of thermal dissipation

**Speaker**

Prof. Jesús Casado Pascual

10:45

# Friday 6 February

09:00

## Quantum Machine Learning

**Session |**

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**Co-Chair:** Dr. Andrea Giachero

09:00–09:20

### Quantum-Enhanced Fraud Detection: A Comparative Study on Real-World Financial Data

**Speaker**

Andrea Cacioppo

09:20–09:40

### A new approach to rating scale definition with quantum optimization

**Speaker**

Laura Cappelli

09:40–10:00

### Quantum image processing and optical neural networks

**Speaker**

Dr Simone Roncallo

10:00