

Session Program

4-5 Nov 2024

Workshop on Tensor Networks and (Quantum) Machine Learning for High-Energy Physics

Prospects on Tensor Networks and Machine Learning

CERN, 4/3-006 - TH Conference Room

Tuesday 5 November

09:00

Prospects on Tensor Networks and Machine Learning

Session | **Location:** CERN, 4/3-006 - TH Conference Room

09:00–09:45

Tensor network algorithms for HEP quantum simulation

Speaker

Simone Montangero

09:45–10:05

Optimising Tree Tensor Networks for classification on hardware accelerators

Speaker

Alberto Coppi

10:05–10:25

Tree Tensor Network implementation on FPGA

Speaker

Lorenzo Borella

10:30–11:00

Morning coffee

11:00–12:00

Provable exponential quantum advantages in learning from physics data

Speaker

Vedran Dunjko

12:00–13:00

Discussion: Using Tensor Networks to Enhance QML Algorithms

13:20