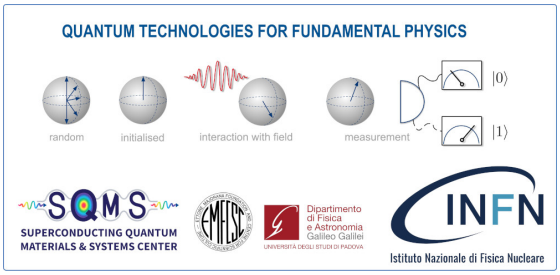

Contribution ID: **62** Type: **not specified**

Quantum computing for HEP application

Wednesday, 6 September 2023 09:00 (25 minutes)

We start from a description of the current challenges in quantum computing for simulation and quantum hardware control in view of applications in HEP. We discuss the role of middleware development for quantum computing. We describe recent applications of quantum computing to high-energy physics for parton distribution functions determinations and Monte Carlo simulation. We conclude by identifying the major points to improve and achieve in the next years.

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Session Classification: Quantum Computation and Simulation