Contribution ID: **37** Type: **On-site planned, but remote also possible**

Particle track reconstruction using quantum computers

Quantum computing holds the potential to solve the ever increasingly challenging problems in high energy physics, one of which is particle tracking in a dense environment. The student will learn about the basics of particle tracking and apply quantum computing algorithms to solve real-world problems in high energy physics. The student will be guided through Jupyter notebook and use Qiskit toolkit from IBM to solve standard example problems before applying it to particle tracking.

Field

B1: Particle physics analysis (software-oriented)

DESY Place

Hamburg

DESY Division

FH

DESY Group

FTX

Special Qualifications:

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