Contribution ID: 122 Type: Oral

Quantum simulations of non-perturbative quantities in hadron scattering

In this presentation, I will discuss our exploratory work on simulating non-perturbative QCD quantities relevant to hadron scattering processes using quantum computing methods. This includes mapping lattice gauge field theories to qubits, simulating parton distribution functions (PDFs), Light-cone distribution amplitudes, and Fragmentation functions on a quantum computer.

Primary author: TIANYIN, Li (RIKEN)

Presenter: TIANYIN, Li (RIKEN)

Track Classification: Quantum computing and artificial intelligence