



Contribution ID: 122 Type: 5th week (Formal developments and other frontiers in lattice QCD)

Towards quantum simulating QCD: loop string hadron approach

Wednesday, November 13, 2024 11:30 AM (1 hour)

Full-fledged Quantum computation/simulation of lattice QCD is a long-term goal and requires developing a set of strategies starting from foundational level. This includes a convenient Hamiltonian framework for the theory along with the Hilbert space construction compatible with the principle of gauge invariance. The recently developed Loop-string-hadron approach is a promising framework for this goal. In this talk, I'll briefly introduce the framework and discuss its applications in the context of quantum computation and benchmarking the same using classical computers.

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