



Contribution ID: 1

Type: **Invited**

## **Gluon Digitization for Quantum Computers**

*Tuesday, 25 August 2020 14:00 (15 minutes)*

The efficient digitization required for the quantum simulations of QCD can be obtained by approximating continuous  $SU(3)$  gluon fields by discrete subgroups. In this talk, we discuss on-going efforts to develop this program of digitization: deriving improved discrete group lattice actions, classical simulations for quantifying systematic errors, and implementable circuits for digital quantum computers.

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**Session Classification:** Tuesday Afternoon