

Abstract Submitted
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Gluon Field Digitization for Quantum Computers HENRY LAMM
IV, Fermilab, NUQS COLLABORATION — 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.

Henry Lamm IV
Fermilab

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