[Updated: 2025/06/26] Also see https://inspirehep.net/authors/1589984 .

Peer-reviewed works

[1] S.V. Kadam, A. Naskar, I. Raychowdhury, & JRS. *Loop-string-hadron approach to SU(3) lattice Yang-Mills theory: Hilbert space of a trivalent vertex.*
[2407.19181] DOI:10.1103/PhysRevD.111.074516 | Phys.Rev.D 111 (2025) 7, 074516.

[2] Z. Davoudi, A.F. Shaw, & JRS. *General quantum algorithms for Hamiltonian simulation with applications to a non-Abelian lattice gauge theory.*
[2212.14030] DOI:10.22331/q-2023-12-20-1213 | Quantum 7 (2023) 1213.

[3] S.V. Kadam, I. Raychowdhury, & JRS. *Loop-string-hadron formulation of an SU(3) gauge theory with dynamical quarks.*
[2212.04490] DOI:10.1103/PhysRevD.107.094513 | Phys.Rev.D 107 (2023) 9, 094513.

[4] JRS. *Shearing approach to gauge-invariant Trotterization.*
[2105.11548] DOI:10.1103/bkpq-166n | Accepted and in production at Phys.Rev.D.

[5] A.F. Shaw, P. Lougovski, JRS, & N. Wiebe. *Quantum algorithms for simulating the lattice Schwinger model.*
[2002.11146] DOI:10.22331/q-2020-08-10-306 | Quantum 4 (2020) 306.

[6] I. Raychowdhury & JRS. *Loop, string, and hadron dynamics in SU(2) Hamiltonian lattice gauge theories.*
[1912.06133] DOI:10.1103/PhysRevD.101.114502 | Phys.Rev.D 101 (2020) 11, 114502.

[7] N. Klco, M.J. Savage, & JRS. *SU(2) non-Abelian gauge field theory in one dimension on digital quantum computers.*
[1908.06935] DOI:10.1103/PhysRevD.101.074512 | Phys.Rev.D 101 (2020) 7, 074512.

[8] I. Raychowdhury & JRS. *Solving Gauss's law on digital quantum computers with loop-string-hadron digitization.*
[1812.07554] DOI:10.1103/PhysRevResearch.2.033039 | Phys.Rev.Res. 2 (2020) 3, 033039.

[9] JRS. *Oracles for Gauss's law on digital quantum computers.*
[1812.01617] DOI:10.1103/PhysRevA.99.042301 | Phys.Rev.A 99 (2019) 4, 042301.

[10] D.B. Kaplan & JRS. *Gauss's law, duality, and the Hamiltonian formulation of U(1) lattice gauge theory.*
[1806.08797] DOI:10.1103/PhysRevD.102.094515 | Phys.Rev.D 102 (2020) 9, 094515.

[11] JRS & G.A. Miller. *Proton charge extensions.*
[1508.06680] DOI:10.1103/PhysRevA.93.012509 | Phys.Rev.A 93 (2016) 1, 012509.

Non-peer-reviewed works

[12] E. Mathew, N. Gupta, Saurabh V. Kadam, A. Bapat, JRS, Z. Davoudi, & I. Raychowdhury. *Tensor-network toolbox for probing dynamics of non-Abelian gauge theories.* [2501.18301] DOI:10.22323/1.466.0472 | PoS LATTICE2024 (2025), 472.

[13] D. Beck, J. Carlson, et al. *Quantum Information Science and Technology for Nuclear Physics. Input into U.S. Long-Range Planning, 2023.* [2303.00113]

[14] D. Blyth, R. Alarcon, R. Begag, J. Holmes, & JRS. *Performance of new silica aerogels in a threshold Čerenkov counter.* [1801.04047]