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Riemannian manifold HMC with fermions

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We report on the study of a version of the Riemannian Manifold HMC (RMHMC) algorithm, where the mass term is replaced by rational functions of the SU(3) gauge covariant Laplace operater.
RMHMC on a 2+1+1-flavor ensemble with near physical masses is compared against HMC, where increased rate of change in Wilson flow scales per fermion Molculardynamics step is observed.

Topical area

Algorithms and Artificial Intelligence

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