32nd International Symposium on Lattice Field Theory (Lattice 2014)



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Conjugate Directions in Landau and Coulomb Lattice Gauge Fixing

Friday, 27 June 2014 14:55 (20 minutes)

We provide details of our implementation of a non-linear conjugate gradient method for Landau and Coulomb gauge fixing with Fourier acceleration. We find clear improvement over the Fourier accelerated steepest descent method, with the average time taken for our algorithm to converge to a fixed, high accuracy, being lower by a factor of 2 to 4 for several lattice volumes.

Primary author: Dr HUDSPITH, Renwick (York University)Presenter: Dr HUDSPITH, Renwick (York University)Session Classification: Algorithms and Machines

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