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



Contribution ID: 342

Type: Talk

Simulating two dimensional two-color QCD using purely bosonic variables

Tuesday, 24 June 2014 15:15 (20 minutes)

The numerical calculation of the fermion determinant is one of the most costly computational tasks in lattice QCD.

For massless two-color QCD in two dimensions we are able to calculate the fermion determinant analytically, allowing us to obtain high precision results for the mass spectrum of the theory. In the talk we review our lattice formulation in terms of purely bosonic variables and present first results on the mass spectrum.

Primary author: Mr AUGUST, Daniel (friedrich schiller universität jena)

Co-authors: Prof. WIPF, Andreas (Friedrich-Schiller-Universität Jena); Dr WELLEGEHAUSEN, Bjoern (JLU Giessen)

Presenter: Mr AUGUST, Daniel (friedrich schiller universität jena)

Session Classification: Hadron spectroscopy and interaction

Track Classification: Hadron Spectroscopy and Interactions