Lattice2010



Contribution ID: 244

Type: not specified

The QCD Phase Transition in a Strong Magnetic Background

Tuesday, 15 June 2010 18:00 (20 minutes)

We investigate the properties of the deconfining/chiral restoring transition for two flavor QCD in presence of a uniform background magnetic field. We adopt a standard staggered discretization of the fermion action, different values of the bare quark mass corresponding to pion masses ranging from 200 to 500 MeV, and magnetic fields up to $eB = 1 \text{ GeV}^2$. We present first results regarding the dependence of the deconfinement and chiral transition temperature and strength on the magnetic field.

Please, insert your presentation type (talk, poster)

talk

Primary author: D'ELIA, Massimo (Universita' di Genova & INFN)

Co-authors: Dr SANFILIPPO, Francesco (Sapienza Universita' di Roma & INFN); Dr MUKHERJEE, Swagato (Brookhaven National Laboratory)

Presenter: D'ELIA, Massimo (Universita' di Genova & INFN)

Session Classification: Poster session

Track Classification: Nonzero temperature and density