Lattice 2024



Contribution ID: 262 Type: Talk

The Roberge-Weiss endpoint in (2+1)-flavor QCD with background magnetic fields

Tuesday, 30 July 2024 15:05 (20 minutes)

In this work we discuss our results on the Roberge-Weiss (RW) transition at imaginary chemical potentials and in the presence of background magnetic fields. We perform lattice QCD simulations on $N_t=6,8$ lattices with 2+1 flavors of stout-staggered fermions at physical quark masses and the tree-level Symanzik improved gauge action. We determine the location the RW endpoint at finite magnetic fields and we study the order of the transition.

Primary authors: ZAMBELLO, Kevin (University of Pisa and INFN - Sezione di Pisa); D'ELIA, Massimo (University of Pisa and INFN); MAIO, Lorenzo (CPT, Marseille); ZANICHELLI, Giuseppe (University of Pisa)

Presenter: ZAMBELLO, Kevin (University of Pisa and INFN - Sezione di Pisa)

Session Classification: QCD at non-zero density

Track Classification: QCD at Non-zero Density