



Contribution ID: 529

Type: **Poster**

## Lattice Two-Color QCD with nonzero chiral density

*Tuesday, 29 September 2015 16:30 (2 hours)*

The phase diagram of two-color QCD with non-zero chiral chemical potential is studied by means of lattice simulation. We focus on the influence of a chiral chemical potential on the confinement/deconfinement phase transition and the breaking/restoration of chiral symmetry. The simulation is carried out with dynamical staggered fermions without rooting. The dependences of the Polyakov loop, the chiral condensate and the corresponding susceptibilities on the chiral chemical potential and the temperature are presented. The critical temperature is observed to increase with increasing chiral chemical potential.

### **On behalf of collaboration:**

NONE

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**Session Classification:** Poster Session

**Track Classification:** QCD at High Temperature