



Contribution ID: 164

Type: **Talk**

Deconfining temperatures in $SO(N)$ and $SU(N)$ gauge theories

Friday, 27 June 2014 14:15 (20 minutes)

We present our current results for the deconfining temperatures in $SO(N)$ gauge theories in 2+1 dimensions. $SO(2N)$ theories may help us to understand QCD at finite chemical potential since there is a large- N orbifold equivalence between $SO(2N)$ QCD-like theories and $SU(N)$ QCD and $SO(2N)$ theories do not have the sign problem present in QCD. We show that the deconfining temperatures in these two theories match at the large- N limit. We also present results for $SO(2N+1)$ gauge theories and compare results for $SO(6)$ with $SU(4)$ gauge theories, which have the same Lie algebras but different centres.

Primary authors: TEPER, Michael (University of Oxford); LAU, Richard (University of Oxford)

Presenter: LAU, Richard (University of Oxford)

Session Classification: Nonzero temperature and Density

Track Classification: Nonzero Temperature and Density