Contribution ID: **29** Type: **talk**

Inverse Magnetic Catalysis in Holographic QCD

Monday, 26 June 2017 15:40 (25 minutes)

Lattice simulations have shown recently that, contrary to earlier expectations, the chiral condensate is suppressed with growing magnetic field near the chiral and deconfinement transition temperatures of QCD, a phenomenon now known as "Inverse Magnetic Catalysis". V-QCD is a holographic model for QCD, which fully includes the backreaction of the quarks to the gluonic degrees of freedom. I demonstrate that this holographic model reproduces the inverse magnetic catalysis, and provides a good qualitative match with lattice results for the condensate and related observables. In particular, the inverse catalysis is enhanced with increasing number of flavors, in agreement with lattice data. I will also comment on the predictions of the model at finite chemical potential and magnetic field.

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