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## A Supersymmetric Color Superconductor from Holography

*Thursday, 24 January 2019 15:00 (30 minutes)*

$N=4$  SYM, and deformations thereof, is a model giving rise to a vast number of explicit examples of strong coupling phenomena via holography. In this talk I will consider probing the system with fundamental matter, focusing on a phase at finite isospin density and low temperatures. The ground state consists of a supersymmetric Higgsed phase with spontaneously broken global symmetries, which reflects in the spectrum of the theory. This is the first example of a supersymmetric Higgsed phase at finite charge density, and it is tempting to draw lessons to try to understand color-superconducting phases of QCD that might be realised in astrophysical contexts. [arXiv:1807.09712 and work in progress].

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