

Iberian Strings 2023



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Towards finite baryon density in confining solutions

Friday 13 January 2023 16:00 (30 minutes)

Understanding the phase diagram of QCD at finite density and temperature remains one of the most prominent open problems in modern physics. In this talk, I will present a model in type IIA supergravity that describes holographically a QCD-like theory at strong coupling. I will show how the phase diagram at finite temperature and external magnetic field looks like. This turns out to be quite rich, both with first and second order confinement/deconfinement phase transitions and a critical point. Finally, I will explain how these results are leading us to find the first realization of finite baryon density in a top-down confining holographic model.

Presenter: SUBILS, Javier (Nordita)

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