Contribution ID: **35**   Type: **Oral presentation**

QCD equation of state via the complex Langevin method

Thursday 28 July 2022 11:25 (25 minutes)

We present results on the phase diagram of Quantum Chromodynamics (QCD) with two light quark flavours at finite chemical potential from first principle lattice simulations. To circumvent the sign problem we use the complex Langevin method. The pion mass is of approximately 480 MeV. We report on the pressure, energy and entropy equations of state. A particular emphasis is put on the "cold" regions of the phase diagram and the observation of the Silver Blaze phenomenon.

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Session Classification: Session