

Contribution ID: 49 Type: Talk

Results on the heavy-dense QCD phase diagram using complex Langevin

Tuesday 2 August 2016 16:30 (25 minutes)

Complex Langevin simulations have been able to successfully reproduce results from Monte Carlo methods in the region where the sign problem is mild and make predictions when it is exponentially hard. We present here our study of the QCD phase diagram in the limit of heavy and dense quarks (HDQCD) for 3 different lattice volumes and the boundary between the hadronic phase and the quark-gluon plasma. We also discuss instabilities encountered in our simulations.

Author: Mr ATTANASIO, Felipe (Swansea University)

Co-authors: Dr JÄGER, Benjamin (Swansea University); Dr SEXTY, Dénes (Bergische Universität Wupper-

tal); Prof. AARTS, Gert (Swansea University)

Presenter: Mr ATTANASIO, Felipe (Swansea University)

Session Classification: Tuesday PM

Track Classification: Quantum Field Theories of dense, cold matter