FAIR next generation scientists - 7th Edition Workshop



Contribution ID: 120 Type: not specified

Lattice QCD at finite temperature and density: present and future

Thursday, 26 May 2022 11:05 (35 minutes)

In this talk I will provide an overview of the lattice formulation of Quantum Chromodynamics (QCD). I will discuss the methods and observables that play a major role in the study of QCD thermodynamics on the lattice. I will focus on results at finite temperature, and weigh in on the achievements and obstacles that the lattice community deals with at the moment. In particular, I will talk about the problem of extending calculations to finite chemical potentials, covering current methods, as well as promising new ones for future explorations of the QCD phase diagram towards higher densities.

Presenter: PAROTTO, Paolo (Pennsylvania State University)