

QCD medium in relativistic heavy-ion collisions

Monday, 6 February 2023 17:05 (25 minutes)

Heavy-ion collision experiments are essential to the goal of characterizing QCD matter properties at different conditions of temperature and density. From the theoretical side, the determination of the QCD phase diagram is only possible at very particular regions, and effective models provide useful, but not definite results. In this talk I will elaborate on how heavy-ion experiments allow to probe different regions of the QCD phase diagram, and how the time evolution of the produced system can be numerically simulated. Finally, I will show how our group can provide theoretical input for these simulations. The comparison of the latter to experimental results serves as a test for the microscopic assumptions on the strong interaction.

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