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Type: **Theory talk**

Coupled baryon, electric charge and strangeness fluctuations in heavy-ion collisions

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Fluctuation observables in heavy-ion collisions probe the constituents, the chemical freeze-out and the transport properties of strongly interacting matter, and signal phase transitions. We present results for second order fluctuations of the conserved charges in QCD from a stochastic diffusion model in a Bjorken-type expansion background. The impact of the cross couplings between the three different currents is included and phenomenological consequences for experimental observables which affect the determination of the freeze-out curve and the search for the QCD critical point are discussed.

Collaboration

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