Hydrodynamics with critical slowing down

Wednesday 8 February 2017 11:40 (20 minutes)

We extend hydrodynamics of a fluid with conserved charge to incorporate the phenomenon of critical slowing down – an essential ingredient for describing the dynamics of QCD matter near the critical point. We develop the general formalism of hydrodynamics with additional critically slow mode extending the validity of hydrodynamics in critical regime. As an application we consider a simple Bjorken model of heavy-ion collision near the critical point.

Preferred Track

New Theoretical Developments

Collaboration

BEST

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Track Classification: New Theoretical Developments