

Binodal Layer and Phase Freezeout in Adiabatically Expanded Hot Dense Matter

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Binodal layer ("Phase Freezeout") and rarefaction shock in Hot Dense Matter (HDM), adiabatically expanded through two-phase region of entropic phase transition are under discussion. For example it could be Quark-Hadron Phase Transition (QHPT) or any other "delocalization-driven" phase transition (pressure-ionization PT, pressure-dissociation PT in electromagnetic HDM etc) when equilibrium thermodynamic path of such adiabatic expansion crosses the two-phase region of considered entropic phase transition. Binodal layer appears at the entering of the two-phase region, while rarefaction shock appears at the stage of leaving the two-phase region of entropic PT.

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