

The evolution of Information entropy in Relativistic Heavy-Ion Collisions

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Shannon information entropy provides an effective tool to study the evolution process in relativistic heavy-ion collisions. Three types of entropy production were studied in relativistic nuclear collisions by using a multi-phase transport mode. The linear growth stage of Thermodynamic entropy seems to indicate the transition of the collision system from quark-gluon plasma to hadronic gas. The inflection point of Multiplicity entropy is probably the appearance of phase transition point. A conclusion can be drawn by the way of adding up various information entropies that a more complete description of information entropy can obtain a smoother evolution curve of information entropy produced in relativistic nuclear collisions.

Abstract Type

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