

Abstract Submitted  
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**Non-Gaussian source function for pions and kaons from a hydro+cascade model** HIROMI HINOHARA, TETSUFUMI HIRANO, Sophia University — We study source functions for pions and kaons from a hybrid model in which event-by-event initial conditions, (3+1)-dimensional ideal hydrodynamics for evolution of the quark gluon plasma and hadronic cascade are combined. We derive the source functions, namely distribution of difference of last interaction points between two pions/kaons, by using this dynamical approach at the RHIC energy. We calculate one-dimensional source function for pions and kaons and compare them with the PHENIX data. Our results show the source function is largely deviated from the Gaussian as the PHENIX observed. We predict three-dimensional source functions which can be compared with experimental data from source imaging technique in the future experiments. We also discuss the azimuthal angle dependence of source functions in non-central collisions.

Hiromi Hinohara  
Sophia University

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