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Phi Meson as Probe for Quark Gluon Phase Transition Z. YASIN,

University of California at Riverside — Vector mesons provides crucial direct signals for characterization of the early times of the quark gluon phase transition predicted at temperature around 150 MeV. Since, Phi Meson is not masked behind other resonances in mass spectra so it provides a nice probe to verify the standard model prediction of chiral symmetry restoration, expected to cause modification of its mass, width and decay channels in the dense hadronic matter. Creation of such a state of matter is main objective of current series of ultra-relativistic heavy ion collision experiments at Brookhaven National Laboratory. Monte Carlo simulations can be used for tracking charge particles through complex detectors. Results from a Monte Carlo Carlo simulation code, developed for verifying the QCD phase transition signals for Phi Meson, will be presented.

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