

Abstract Submitted
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ϕ meson measurement via K^+K^- decay channel in d+Au collisions at $\sqrt{s_{NN}} = 200$ GeV DIPALI PAL, Vanderbilt University, Nashville, TN, PHENIX COLLABORATION — The measurement of the line shape of the ϕ meson invariant mass spectrum in relativistic heavy ion collisions is a powerful tool to search for in-medium modifications of vector meson properties (mass and/or width) as chiral symmetry restoration is approached. Consisting of a $s\bar{s}$ pair, the ϕ meson can also be used to probe strangeness production. The current results of ϕ meson production in the K^+K^- channel detected by the PHENIX central arm spectrometer in d+Au collisions will be presented. The system size and centrality dependence of the ϕ spectral shapes and yields will be studied through the comparison with results obtained in Au+Au and p+p collisions.

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