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Measurement of ϕ meson production in Cu+Cu collisions at $\sqrt{s_{NN}}$ = 200 GeV from PHOBOS SIARHEI VAURYNOVICH, Massachusetts Institute of Technology, PHOBOS COLLABORATION — Due to a combination of its long lifetime and a small hadronic scattering cross-section, the ϕ meson is a valuable probe of the early evolution of matter created in heavy ion collisions. In this talk, we present our measurement of ϕ meson production in Cu+Cu collisions at $\sqrt{s_{NN}}$ = 200 GeV using the $\phi \rightarrow K^+K^-$ decay channel. A comparison to the corresponding measurements from PHENIX and STAR will be made. The centrality evolution of ϕ meson dN/dy values will be discussed. A motivation for a measurement of ϕ meson production at $\sqrt{s_{NN}} \simeq$20 GeV will be given. We also discuss the implications of an absence of any observed in-medium modifications of the mean or the width of the ϕ meson.

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