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Production of Phi Mesons in AA Collisions at $\sqrt{s_{NN}}$ = 62.4GeV measured by the PHENIX experiment SHENGLI HUANG, PHENIX Collaboration — The phi meson mass centroid and width may provide information about partial chiral symmetry restoration in the hot and dense medium. The similar mass of the phi meson and the proton also makes the phi meson a good probe to study the baryon/meson anomaly in hadron production at intermediate transverse momentum (2 GeV/c $<$ p_T $<$ 5 GeV/c). The PHENIX experiment has studied the production of phi mesons in Au+Au and Cu+Cu collisions at $\sqrt{s_{NN}}$ = 62.4 GeV using the $\phi \rightarrow$ K+ K- decay channel. We will present the latest results on transverse momentum spectra, invariant yields, nuclear modification factor(R_{cp}) and line-shape analysis (mass centroid and width) measured as a function of centrality.

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