

Systematics of Hidden and Open Strangeness Production in Few GeV HICs

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Investigating strangeness production and propagation in heavy-ion collisions in the few GeV energy regime is a sensitive tool for studying the properties of matter at high baryo-chemical potential.

In this contribution, we present results on the production of strange hadrons from a total of 3×10^9 most active Ag(1.58A GeV)+Ag events recorded with HADES and compare the measured multiplicities with results obtained from a hadron resonance gas model realizations with different parameters. Special attention is put to the comparison between different canonical descriptions in the context of strangeness suppression.

With respect to this, the $\phi(1020)/\Xi^-$ - and $\phi(1020)/K^-$ -ratios are utilized to test the consistency of the corresponding models in describing their relative yields. The significant softening of the K^- transverse spectra due to the $\phi(1020)$ feed-down is also discussed.

Furthermore, we discuss the centrality (A_{part}) dependence of strange-hadron multiplicities, which were found to follow a universal scaling for the collision system Au(1.23A GeV)+Au.

Finally, we present a first glimpse into this year's Au+Au beam energy scan data at energies between 400 and 800 A GeV.

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