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Λ and K_s^0 production in Au+Au collisions at 1.23 AGeV with the HADES experiment

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Over the years an extensive amount of data in the 1-2 AGeV energy regime has been collected leading to enormous improvements of our understanding of particle production mechanisms and HIC dynamics. At these beam energies the production of hadrons is observed below or slightly above their free elementary production threshold. Due to this fact a comparison to reference data from elementary collisions is not straightforward and phenomenological models are mandatory.

For this analysis, 7.3 billion of the 40% most central Au(1.23 AGeV per nucleon)+Au reactions have been used to reconstruct the weakly decaying strange hadrons K_s^0 and Λ . In order to draw conclusions on strangeness production mechanisms the yields will be compared to non-strange particle production and phenomenological models, allowing to further deepen our understanding of hadron production in HIC.

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On behalf of collaboration:

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