Recent Hypernuclei Measurements from the STAR Experiment

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- Hypernuclei, bound states of hyperons and nucleons, have been suggested as sensitive probes to the medium properties of the nuclear matter created in heavy-ion collisions. Measurements on the intrinsic properties of hypernuclei, such as their lifetimes and binding energies, can also provide constraints to the hyperon-nucleon interaction, which is an essential ingredient in the equation-of-state of high baryon density matter.

 In this presentation, recent results on the intrinsic properties of light hypernuclei (3 H 4 H).
- In this presentation, recent results on the intrinsic properties of light hypernuclei (${}^3_{\Lambda}$ H, ${}^4_{\Lambda}$ H, and ${}^4_{\Lambda}$ He), as well as their production yields in heavy-ion collisions will be discussed. These results are compared with model calculations, and the physics implications will be discussed.
- Recent observations of the ${}^{5}_{\Lambda}$ He in Au+Au collisions will be shown.