

Recent Hypernuclei Measurements from the STAR Experiment

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Hypernuclei, bound Λ states of hyperons and nucleons, have been suggested to be 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 give 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 (${}^3_{\Lambda}\text{H}$, ${}^4_{\Lambda}\text{H}$, and ${}^4_{\Lambda}\text{He}$), 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.

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