

QUARK MATTER, Houston 2023 PROTON-CLUSTER FEMTOSCOPY WITH THE HADES EXPERIMENT

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The matter created in heavy-ion collisions Ag+Ag at $\sqrt{s_{NN}}$ = 2.55 GeV at the HADES experiment can be characterized by similar thermodynamic quantities as NS mergers, thus becoming an essential reference for the study of these compact stellar objects. One of the methods applied in these studies are femtoscopic correlations. They are an unique tool for the determination of the interactions between hadrons and searching for possible exited or unbound states of nuclear matter. We performed precise experimental studies of the correlations between protons and different clusters and compared it with the existing theoretical descriptions.



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