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Searches for exotic particles in d+Au collisions at $\sqrt{s_{NN}}=200~{\rm GeV}$ and Au+Au collisions at $\sqrt{s_{NN}}=62.4~{\rm GeV}^1$ JINGGUO MA, UC Los Angeles — Exotic particles such as pentaquark states and di-baryons are allowed to exist within the framework of Quantum Chromo Dynamics (QCD). Several experiments reported the evidence for the existence of a pentaquark state, $\Theta^+(uudd\bar{s})$, however, several other experiments reported null results. We present results on the search of pentaquark states in d+Au collisions at $\sqrt{s_{NN}}=200~{\rm GeV}$ and Au+Au collisions at $\sqrt{s_{NN}}=62.4~{\rm GeV}$ from the STAR experiment at RHIC. Statistical significance of our searches will be discussed.

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