

Strangeness in Quark Matter 2019



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Sequential Coalescence with Charm Conservation in High Energy Nuclear Collisions

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Heavy quarks are initially produced in nuclear collisions and the number is conserved during the evolution of the system. We establish a sequential coalescence model with charm conservation and apply it to charmed hadron production at RHIC and LHC energies. The charm conservation enhances the earlier formed hadrons and reduces the later formed ones, which leads to a D_s/D_0 enhancement and a Λ_c/D_0 suppression. The mass dependence of the sequential hadron formation provides us a new tool for studying the quark-gluon plasma hadronization in high energy nuclear collisions.

Collaboration name

Track

Heavy Flavour

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