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Charmonium resonance production from quark coalescence

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We have considered a relativistically invariant quark coalescence model to predict hadronic resonance productions in heavy ion collisions. We extended our model - which has been applied earlier for strange and non-strange hadrons - to describe charmonium meson ratios, namely J/psi, Psi' and xi_c, at RHIC energies.
In the applied quark coalescence model the widths of the produced mesons and resonances plays an important role and determines the yield of these particles.
In the charm sector the values of meson width have a special structure, which feature enhances the importance of meson width and the effective gluonic widening in the population of the different charmonia channels.
We display our numerical results at RHIC energies.

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