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J/ψ production in minimum-bias d+Au collisions at $\sqrt{s_{NN}}=200$ GeV in STAR CHRISTOPHER POWELL, Lawrence Berkeley National Laboratory/University of Cape Town, STAR COLLABORATION — The production of J/ψ and other heavy quarkonia is of particular interest in relativistic heavy ion collisions, as their yields are supposed to be suppressed in the presence of the hypothesised hot, dense quark gluon plasma. However, there are other in-medium effects which will also suppress/enhance the production of J/ψ (eg. Cronin effect, nuclear absorption and (anti-)shadowing effect). To understand the suppression and enhancement of heavy quarkonia in A+A collisions, we must first understand how yields are modified by a nuclear medium where no hot matter is present. Light systems such as p+p, p+A and d+A are particularly interesting as there are only cold nuclear matter effects present. We present the analysis of J/ψ production in d+Au at $\sqrt{s_{NN}}=200$ GeV (year 2008) with the STAR detector. Since this is the first run with a reduced amount of material in the centre of the detector (low material run), we expect a significant decrease in the number of background electrons as compared to previous runs. This provides a better handle on background and improves the signal quality.

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