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Estimate of the *B* decay contribution to total J/ψ production at RHIC and the LHC¹ RAMONA VOGT, RANDY NELSON, LLNL and UC Davis — We assess the theoretical uncertainties on the inclusive J/ψ production cross section in the Color Evaporation Model and compare them to the uncertainties in secondary J/ψ production through *B* meson decays, $B \to J/\psi X$, calculated in the FONLL approach. We discuss the importance of the quark mass and the choice of renormalization and factorization scale on the uncertainty estimate. We then construct the uncertainty in the ratio of J/ψ production by *B* decays to the total J/ψ production and present the results as a function of p_T at mid and forward rapidities for the RHIC and LHC detector acceptances over a range of center of mass energies.

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