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## J/Psi production with NRQCD: HERA, Tevatron, RHIC and LHC

The factorization theorem of nonrelativistic QCD (NRQCD) is a framework for the production and decay of heavy quarkonia. In order to establish NRQCD it is necessary to show the significance of the color-octet (CO) contributions and the universality of the "long distance matrix elements" (LDME) in different high energy processes. We have now succeeded in calculating the cross section of both J/Psi photo- and hadroproduction at next-to-leading order within the NRQCD framework, including the CO contributions. We performed a combined fit of the CO LDMEs to Tevatron and HERA data. We compared our results also with recent PHENIX data from RHIC and CMS data from the LHC. Thus we have shown that hadro- and photoproduction can be consistently described by NRQCD: The data from all experiments can be well described by the sum of color singlet and color octet contributions, while the color singlet contributions alone fall short of the data by far.

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