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Measurement of double J/psi productions with the CMS detector GRANT V. RILEY, ANDREW YORK, Univ of Tennessee, Knoxville, CMS COLLABORATION — We present the measurement of the cross section for the simultaneous production of two J/psi mesons in proton-proton collisions with the CMS detector. The two J/psi mesons are fully reconstructed in the mu+mu- decay and the signal yield is extracted with an extended maximum likelihood fit. The differential cross section is measured in bins of the double J/psi invariant mass, the absolute difference in rapidity of the two J/psi mesons, and the transverse momentum of the double J/psi system. The results can provide the inputs for QCD calculations and for the constraints on the contribution of double-parton scattering.

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