

Abstract Submitted
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Quarkonium Production at CMS MAKSAT HAYTMYRADOV, University of Iowa, CMS COLLABORATION — Quarkonium production has long been considered as an ideal means of investigating QCD and other new phenomena. The first simultaneous production of two J/ψ -mesons was observed in 1982 by NA3 collaboration, and later it was followed by the LHCb and CMS collaboration. At NA3, the main contribution to the cross section arises from the quark-antiquark annihilation channel. On the contrary, gluon-gluon scattering is dominant at the Tevatron and the LHC colliders. We present the studies of double quarkonium production in 20.7 fb^{-1} integrated luminosity in proton-proton collisions at $\sqrt{s} = 8 \text{ TeV}$. Both quarkonia are fully reconstructed from $\mu^+ \mu^-$ pairs, and preliminary cross-section of production will be reported.

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