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New observables in quarkonium production

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References:

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Summary

In this talk, I will focus on the study of associated-quarkonium production in a number of channels at the LHC. First, I will address the case of quarkonium-pair production [1,2,3] which has recently been studied by LHCb [4], CMS [5] and D0 [6,7]. I will argue that the inclusion of Double-Parton Scattering (DPS) and Next-to-Leading Order (NLO) contributions are necessary to account for the existing data. I will then address the case of quarkonium + vector boson [8,9,10] which has recently been studied by ATLAS [11,12].

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