

Energy dependence of direct-quarkonium production in pp collisions from fixed-target to LHC energies:complete one-loop analysis.

Thursday 30 March 2017 15:45 (30 minutes)

We compute the energy dependence of the pt-integrated cross section of directly produced quarkonia in pp collisions at next-to-leading order within the nonrelativistic QCD framework. We treat the pt-integrated and the pt-differential cross sections as two different observables to investigate whether the CO LDMEs extracted from the fits of the pt-differential cross sections can predict the pt-integrated cross sections. We also consider the cross sections calculated in CSM and CEM. Our study do not support the past claims that color-octet transitions are dominantly responsible for low-pt quarkonium production.

Authors: FENG, Yu (Third Military Medical University, Chongqing,Southwest of China); LANSBERG, Jean-Philippe (IPN Orsay, Paris Sud U. / IN2P3-CNRS); WANG, Jianxiong (IN)

Presenter: FENG, Yu (Third Military Medical University, Chongqing,Southwest of China)

Session Classification: Proton-proton collisions

Track Classification: Proton-proton collisions