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Study of J/ψ production with jet activity in pp collisions at $\sqrt{s}$ = 200 GeV at the STAR experiment HAO HUANG, National Cheng Kung University, STAR COLLABORATION — The fragmentation function is believed to play a crucial role to differentiate different production mechanisms of J/ψ. In order to have a better understanding of charm quarks and gluons fragmenting into J/ψ, production of J/ψ mesons in jets has been studied in pp collisions at the LHC and RHIC. The measured J/ψ production is found to be much less isolated than nonrelativistic QCD (NRQCD) prediction as implemented in PYTHIA. The dependence of J/ψ production on jet activity (the number of jets per event) is another observable which could be easily compared with theoretical predictions to understand the relation between jet fragmentation and J/ψ production. In this talk, we will present the progress of the study of J/ψ production with jet activity at mid-rapidity in pp collisions at $\sqrt{s} = 200$ GeV at the STAR experiment.

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