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Fragmentation of J/psi in jets in pp collisions at root s=5.02 TeV Batoul Diab for the CMS collaboration

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Abstract

The fragmentation of jets containing a J/psi meson is studied in root s = 5.02 TeV pp data using an integrated luminosity of L = 27.39 pb(-1). The fraction of the jet transverse momentum p(Tjet) carried by the J/psi is measured for prompt J/psi and J/psi coming from b hadron decays, named nonprompt. Whereas the fragmentation function of nonprompt J/psi is well-modeled by simulations using a Monte Carlo generator, the prompt J/psi are found to be accompanied by a larger level of jet activity. The fraction of J/psi mesons that are produced inside a jet is also reported, and found to be larger in data than in simulation, for both prompt and nonprompt J/psi.

Keywords

Author Keywords: CMS; J/psi; Jets; pp collisions

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