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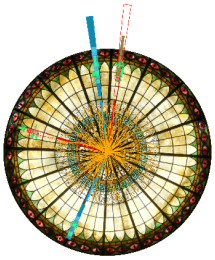

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Measurement of four-jet production including two heavy-flavour jets in pp collisions at 7 TeV with the CMS experiment

Wednesday 29 April 2015 11:35 (20 minutes)

Measurements of the differential cross sections for the production of at least four jets, two of them initiated by b-quarks, in proton-proton collisions are presented as a function of the transverse momentum pt and pseudorapidity eta, together with the correlations in azimuthal angle and the pt balance among the jets. The data sample was collected in 2010 at a center-of-mass energy of 7 TeV with the CMS detector at the LHC with an integrated luminosity of 3pb-1. The measurement, compared to predictions from different models, shows that the addition of parton showers to fixed-order matrix element calculations describe the measured differential cross sections in only some regions of phase space. Including a contribution from double parton scattering in the models improves the predictions.

Presenter: GUNNELLINI, Paolo (Deutsches Elektronen-Synchrotron (DE))

Session Classification: WG5 Heavy Flavours

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