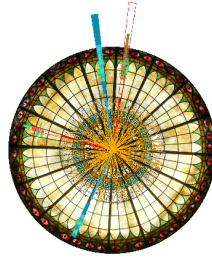


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Measurement of four-jet production including two heavy-flavour jets in pp collisions at 7 TeV with the CMS experiment

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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 p_T and pseudorapidity η , together with the correlations in azimuthal angle and the p_T 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.

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Session Classification: WG5 Heavy Flavours

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