XXI International Workshop on Deep-Inelastic Scattering and Related Subjects



Contribution ID: 133

Type: Talk in Parallel Session at DIS2013

Measurement of the flavour composition of dijet events in pp collisions with ATLAS

Wednesday 24 April 2013 14:40 (20 minutes)

A measurement of the flavour composition of dijet events produced in pp collisions at 7 TeV using the ATLAS detector is presented. Six possible combinations of light, charm and bottom jets are identified in the dijet events, where the jet flavour is defined by the

presence of bottom, charm or solely light flavour hadrons in the jet.

The results agree with the predictions of leading- and next-to-leading-order calculations, with the exception of the dijet fraction composed of bottom and light flavour jets, which is underestimated by all models at large transverse jet momenta. The ability to identify jets containing two b-hadrons, originating from e.g. gluon splitting, is demonstrated. The difference between bottom jet production rates in leading and subleading jets is consistent with the next-to-leading-order predictions.

Author: COLLABORATION, ATLAS

Presenter: SHIMIZU, Shima (Kobe University (JP))

Session Classification: WG4/5: Heavy Flavours, QCD and Hadronic Final States

Track Classification: Heavy Flavours