

Contribution ID: 299

Type: Poster Presentation

## Measurement of the bbar dijet cross section in pp collisions at sqrt(s) = 7 TeV with the ATLAS detector

The dijet production cross section for jets containing a b-hadron (b-jets) has been measured in proton-proton collisions with a centre-of-mass energy of 7 TeV, using the ATLAS detector at the LHC. The data used correspond to an integrated luminosity of 4.2/fb. The cross section is measured for events with two identified b-jets with a transverse momentum pT > 20 GeV. At least one of the jets in the event is required to have pT > 270 GeV. The cross section is measured differentially as a function of dijet invariant mass, dijet transverse momentum, boost of the dijet system and the rapidity difference, azimuthal angle and angular distance between the b-jets. The results are compared to different predictions of leading order and next-to-leading order perturbative quantum chromodynamics matrix elements supplemented with models for parton-showers and hadronization.

## **Experimental Collaboration**

ATLAS

**Presenter:** VERDUCCI, Monica (Universita e INFN, Roma Tre (IT)) **Session Classification:** Poster session

Track Classification: QCD and Hadronic Physics