

8th Beam Telescopes and Test Beams Workshop



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Study of energy response and resolution of the ATLAS Tile Calorimeter to hadrons of energies from 16 to 30 GeV

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Three spare modules of the ATLAS tile calorimeter were exposed to test beams of pions, kaons and protons from the Super Proton Synchrotron (SPS) accelerator at CERN in 2017.

The measurements of the energy response and resolution of the detector to pions, kaons and protons with energy in the range 16 to 30 GeV are reported.

The characterization of the response of the ATLAS calorimeter to hadrons is important to probe, validate and improve the modelling of the jets energy characterization of the ATLAS simulation using the Geant-4 toolkit.

Authors: FIORINI, Luca (Univ. of Valencia and CSIC (ES)); ZAKAREISHVILI, Tamar (Ivane Javakhishvili Tbilisi State University (GE))

Presenter: ZAKAREISHVILI, Tamar (Ivane Javakhishvili Tbilisi State University (GE))

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