## XI International Conference on New Frontiers in Physics



Contribution ID: 36 Type: Talk

# Jet and MET reconstruction and calibration in ATLAS

Wednesday 7 September 2022 15:50 (20 minutes)

Jets and Missing transverse momentum (MET), used to infer the presence of high transverse momentum neutrinos or other weakly interacting neutral particles, are two of the most important quantities to reconstruct at a hadron collider. They are both used by many searches and measurements in ATLAS. New techniques combining calorimeter and tracker measurements, called Particle Flow and Unified Flow, have significantly improved the reconstruction of both transverse momentum and jet substructure observables. The procedure of reconstructing and calibrating ATLAS Anti-kt R=0.4 and R=1.0 jets using in situ techniques is presented. The reconstruction and performance in data and simulation of the MET obtained with different class of jets and different pile-up suppression schemes, including novel machine learning techniques, are also presented.

# Is the speaker for that presentation defined?

Yes

#### **Details**

Romain Bouquet - speaker romain.bouquet@cern.ch spend only 7 days at the conference; talk would best fit in the "Mini Workshop on Instruments and Methods in HEP" session.

## Is this abstract from experiment?

Yes

## Name of experiment and experimental site

ATLAS

## Internet talk

Maybe

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