## EPS-HEP2019



Contribution ID: 234 Type: Parallel talk

## Measurements of the top quark mass using the ATLAS detector at the LHC

Thursday 11 July 2019 10:45 (15 minutes)

The latest measurements of the top quark mass using the ATLAS experiment are presented. A measurement based on a multi-dimensional template fit that can constrain the uncertainties on the energy measurements of jets is presented and combined with measurements using dilepton and all-hadronic events. In addition, an analysis of the top quark mass using leptonic kinematic variables is discussed. The measurement uses a novel technique to measure the top quark mass with minimal dependence on hadronic jets. The measurements that use precision theoretical QCD calculations for both inclusive ttbar production and ttbar production with an additional jet to extract the top quark mass in the pole-mass scheme are also presented.

Author: JUSTE ROZAS, Aurelio (ICREA and IFAE (ES))

**Presenter:** KNUE, Andrea Helen (Albert-Ludwigs-Universitaet Freiburg (DE))

Session Classification: Top and Electroweak Physics

Track Classification: Top and Electroweak Physics