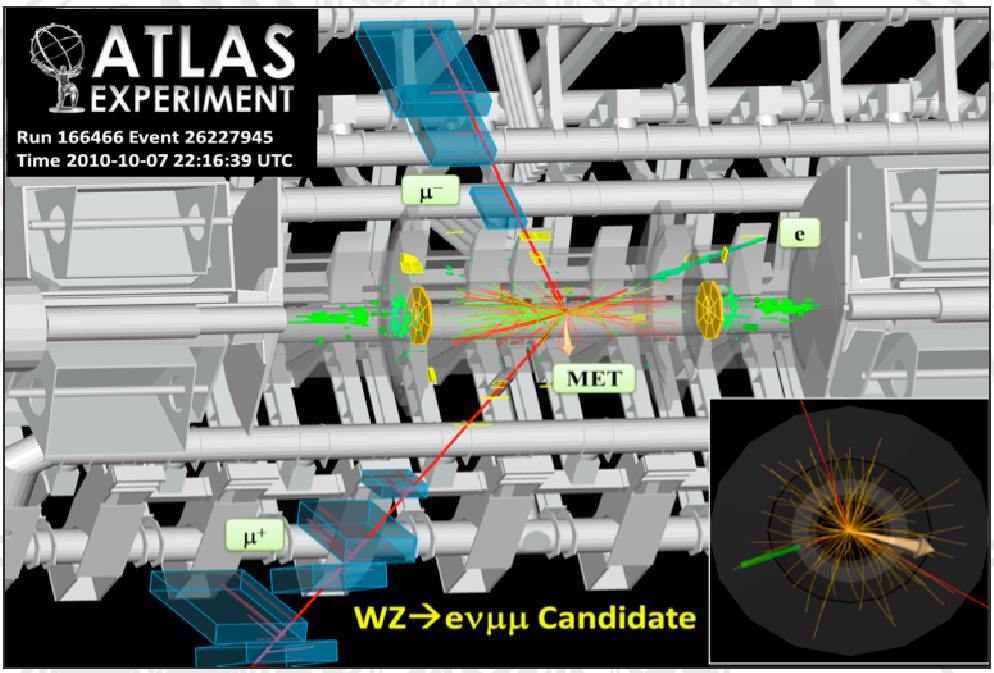
Physikalisches Institut
Fakultät für Mathematik und Physik
Albert-Ludwigs-Universität Freiburg

PHYSIKALISCHES KOLLOQUIUM

AM 23. JANUAR 2012 UM 17 UHR C.T.

IM GROßEN HÖRSAAL



RECENT RESULTS FROM THE ATLAS EXPERIMENT AT THE LHC

DR. FABIOLA GIANOTTI

CERN, GENF

LEITERIN DES ATLAS EXPERIMENTES

The ATLAS Detector is one of the two large multi-purpose detectors at the Large Hadron Collider (LHC) at CERN. The main goal of the experiment is to study the Standard Model of Particle Physics and to search for new physics in high-energy proton-proton collisions.

Data taking in 2011 at a centre-of-mass energy of 7 TeV has been very successful, allowing ATLAS to record 100 times more data than in 2010 and to perform a huge number of physics studies.

The talk will summarize the main physics results obtained so far, from W- and Z-boson production, to top-quark measurements, and the search for the Higgs boson and for physics beyond the Standard Model.