
Contribution ID: **28** Type: **not specified**

# Search for displaced Lepton Jets with the ATLAS detector and the Phase-I ATLAS upgrade

This poster shows two different studies regarding the ATLAS detector at LHC and done in the first phd year.

The first one regards the Hidden Valley model, which is a new physics theory beyond the Standard Model that predicts neutral particles with decay final states consisting of collimated jets of light leptons and hadrons (called Lepton Jets). In particular, this search regards Lepton Jets made of light leptons and hadrons in proton-proton collisions at the centre of mass energy of $\sqrt{s}$ = 8 TeV with the ATLAS detector at LHC.

The second one regards the the PhaseI ATLAS upgrade which consists in the upgradeof the Small Wheel in the endcap muon spectrometer at ATLAS. The main focus of the PhaseI ATLAS upgrade is on the Level1 trigger and will be installed very innovative detector: the “Micro Mesh Gaseous structure” (MM), composed by three elements: the drift panel (cathode), the Micromesh and the readout panel. The quality control for these panels consists in mechanical measures (planarity,thickness), electric measure and gas tightness.

**Primary author:** Dr DEL GAUDIO, Michela (università della calabria)

**Presenter:** Dr DEL GAUDIO, Michela (università della calabria)