

ESR introduction

Serena Palazzo ESR within the INSIGHT network → Started middle of June

Institute: The University of Edinburgh

Supervisor: Michele Faucci Giannelli

Education:

Bachelor's degree in 2011 at the University of Calabria, Italy

Master's degree in 2014 at the University of Calabria, Italy

PhD 2018 (after being hired in the INSIGHT) at the University of Calabria, Italy





My previous experiences:

- Calibration of DREAM calorimeter
- Quality tests on MicroMegas chambers prototype for the Phase1 upgrade of the ATLAS muon spectrometer
- Measurements of differential cross sections of top quark pairs in association with jets → unfolding work for the extraction of the cross sections (ATLAS experiment)

What I will do within the INSIGHT Network:

- Differential cross section measurements of top quark pairs in both $l+jets$ and all hadronic channels
- Differential cross section measurements for $H \rightarrow \gamma\gamma$ final states.
- Simulation work → Use of deep neural network techniques, such as GANs, for the ATLAS Fast Simulation.

