

Summer Student Session 2011

Student: Stephen Portillo

Date and Time: Tuesday, 16th August from 12:00 – 12:15

Subject: “Towards searching for trapped slepton decays in ATLAS”

Biography

Brief CV:

- ❖ Field of Study: Astrophysics

- ❖ Education: Year III BSc Honours, University of Alberta

- ❖ Project: Charged sleptons with long lifetimes ($\sim$ days) are cosmologically favoured in supergravity where the gravitino is the lightest supersymmetric particle. When no proton collisions are occurring, cosmic rays are the major background in searches for decays of sleptons trapped in the ATLAS detector. This project develops a method to suppress this background by distinguishing between upward-going and downward-going muons using timing information recorded by ATLAS's monitored drift tubes.