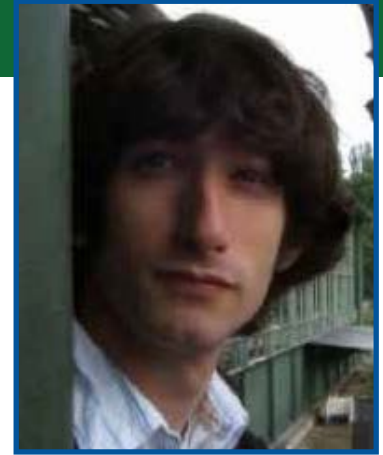# Christopher Lester

Graduate Institution: University of Pennsylvania

Graduate Discipline: High Energy Physics

Hometown: Marietta, GA

Relevant SC Research: High Energy Physics

Research Interest:

I am currently involved in research which investigates nature at the smallest length scales, and as a result, highest energies ever obtained in a laboratory. I am working on a number of projects aimed at the discovery of the Higgs Boson, a particle necessary to verify the structure of the Standard Model, the theory that describes the interactions of elementary particles. I work on the ATLAS experiment at CERN with over 2000 other scientists, where we are collecting data from proton-proton collisions at center of mass energies of 8 TeV. With this year's dataset, we will be able to make a conclusive statement about the existence of the Higgs. Searches for the Higgs Boson are also some of the most exciting searches for new physics beyond the Standard Model, because the coupling and interactions of the Higgs are one of the few unmade yet achievable measurements in particle physics. The nature of the Higgs will provide insight into the way nature endows fundamental particles with mass and how certain symmetries are broken.

My personal contribution to the research is the development of electron identification algorithms and triggers that allow us to efficiently collect interesting data. I am wrapping up a likelihood based electron discriminant and am focusing on Higgs search in final states involving W bosons.

About Me:

I love science and the days I can stand back and think and marvel at what I am actually doing are the best. When I am not working, I am trying to keep in shape with weight lifting, running and boxing or I am trying to unwind with friends over dinner and drinks or just reading and cooking. Being in Europe the last two years has afforded me the opportunity to travel easily and I am taking full advantage of my surroundings, but I am looking forward to coming back home to American at the end of the year.