

Adam Leo Dishaw

Graduate Institution: University of California - Santa Barbara

Graduate Discipline: High-Energy Experimental Physics

Hometown: Shrub Oak, NY

Relevant SC Research: High Energy Physics



Research Interest:

As an undergraduate, I have worked with Professor James Alexander on a mass measurement technique using the transverse mass variable MT_2 . Use of MT_2 allows for mass measurements in particle decays which pair produces neutrinos or other weakly interacting particles which escape from detectors. This method has been test on the top quark in the dilepton decay chain, and it is hoped that the method will prove useful in measuring the masses of new physics particles. Supersymmetry, if found, could provide one interesting application with decay chains producing neutralinos.

In the future, I am interested in potentially joining a search for supersymmetry or other new physics. I will continuing on the Compact Muon Solenoid (CMS) experiment at CERN, and look forward to seeing what is found in the next few years.

About Me:

I recently completed my undergraduate degree in physics and mathematics at Cornell University. While there, I began research with Professor James Alexander in my sophomore year. There, I helped develop a mass measurement technique that was intended to measure the mass

of new physics particles and which was tested on dileptonic decays of top-antitop pairs at the Compact Muon Solenoid (CMS) experiment at CERN.

This June, I will be moving to Santa Barbara to begin research at the University of California, Santa Barbara, where I will be starting work towards a PhD in physics in the fall. I will be continuing to work on CMS in high-energy experimental physics. In the future, I hope to become a professor or work in a research position in a national lab.

Outside of physics, I enjoy rock climbing, running, and martial arts, including karate and kendo.



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