

**Wednesday, October 12, 2011**

**3:30 - 4:30 p.m. • Kellogg Hotel & Conference Center • Red Cedar Rooms A/B**

*Reception to follow*

## ATLAS: The Greatest Show on Earth



### Lily Asquith, Ph.D.

Research Scholar, Argonne National Laboratory, Chicago

Lily Asquith received her Ph.D. from University College London in June 2010. Her research focused on the search for the elusive, low mass Higgs boson—the subatomic particle the scientists say endows everything in the universe with mass. Proving the existence of the Higgs boson is one of the main goals of the Large Hadron Collider (LHC), located deep beneath the border between France and Switzerland. In August 2010, Asquith accepted a position as a post-doctoral research scholar at Argonne National Laboratory in Chicago.

Dr. Asquith is one of the originators of the LHC Sound Project, a group of particle physicists, composers, software developers, and artists who convert data from both real and simulated particle collisions at the LHC into sound. The aims of the project are: 1) to attract people to the results of the LHC experiments in a way that is novel, exciting, and accessible; 2) to establish mutually beneficial communication between the usually disparate fields of music and science and provide composers with access to LHC data; and 3) to introduce particle physicists to the possibility of using sonification as an analysis technique and begin to establish the methods available for doing this. The LHC Sound Project won an award from Science and Technology Facilities Council for public outreach. Her innovative approach to making particle physics data available to the public has also been featured on National Public Radio: <http://www.npr.org/2011/01/02/132415764/particle-pings-sounds-of-the-large-hadron-collider>.

#### ABSTRACT

Dr. Asquith will discuss her recent research with ATLAS. The ATLAS detector has been collecting data from the aftermath of the world's highest energy collisions for just over a year. The results are pouring in, but how can they be interpreted in such a way that someone from outside the small and “special” world of high energy physics can understand and enjoy them?

**! Please register by October 10, 2011 online at:**  
**[outreach.msu.edu/events/Asquith](http://outreach.msu.edu/events/Asquith)**

**This event is free and open to the public. Seating is limited.**

Michigan State University is committed to providing equal opportunity for participation in all programs, services, and activities. Accommodations for persons with disabilities may be requested as part of the registration by October 10, 2011. Requests received after this date will be honored whenever possible.

**Web: [ncsue.msu.edu](http://ncsue.msu.edu)**

**E-mail: [ncsue@msu.edu](mailto:ncsue@msu.edu) • Phone: (517) 353-8977**

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