



Cleveland Astronomical Society

www.clevelandastronomicalsociety.org

Thursday, November 1, 2007 Meeting Announcement

6:15—7:00 p.m. – Get acquainted and snacks

7:45—8:00 p.m. – Short Business Meeting

7:00—7:45 p.m. – Buffet Dinner (Reservations Required)

8:00—9:00 p.m. – Featured Speaker (Free to public)

Leonard Krieger CanalWay Center

4524 East 49th Street (turn onto Whittlesey Way to reach Center), Cuyahoga Heights, (216) 206-1000

Dr. Corvin Couvalt

CWRU Physics Astrophysics Group

The Highest Energy Cosmic Rays

Cosmic rays are high energy particles that arrive at the surface of the earth from all directions. The astrophysical origins of the highest energy cosmic rays has remained a persistent mystery for decades. Where in the universe do these particles come from? How do they obtain such enormous energies? Now we seem to be on the verge of getting a new handle on where in the universe these things come from.

The Pierre Auger Observatory in Malargue Argentina has been operating since 2004, and already we have some clear clues, including the energy spectrum and limits on photon flux that strongly suggest an extragalactic origin for the highest energy cosmic rays. More recently the unparalleled collecting area of Auger has been brought to bear on the question of potential correlations between particular astrophysical objects and cosmic ray arrival directions.

In this talk Dr. Couvalt will outline some of strategies that Auger has developed in an effort to stalk the cosmic rays, and summarize the prospects for finally capturing the elusive origins of these most energetic particles in the universe.

High School Teachers interested in bringing two students, as our guests, please contact Bob Sledz, President, at 440-333-7827 or sledzbob@yahoo.com, if possible two weeks or more prior to scheduled meeting date.