



# Cleveland Astronomical Society

[www.clevelandastronomicalsociety.org](http://www.clevelandastronomicalsociety.org)

## Thursday, January 5, 2012 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 49<sup>th</sup> Street (turn onto Whittlesey Way to reach Center), Cuyahoga Heights (216-206-1000)

### Speaker – Arthur B Kosowsky

Associate Professor of Physics and Astronomy  
University of Pittsburgh

### New Results from the Atacama Cosmology Telescope

The Atacama Cosmology Telescope is a 6.5-meter microwave telescope located in Chile's Atacama Desert, instrumented with three thousand superconducting bolometers. It is designed to make arcminute-resolution maps of the cosmic microwave background radiation. I will describe the reasons behind its design features, and then give an overview of the first scientific results of this experiment. These include detection of numerous new galaxy clusters at high redshifts, a probe of neutrino masses, measurement of the primordial density perturbations which grew into structure we see today, and the first measurement of gravitational lensing of the microwave background radiation.

**High School Teachers** interested in bringing two students, as our guests, please contact Bob Sledz, President, at 440-333-7827 or [isledz@yahoo.com](mailto:isledz@yahoo.com) by the Friday prior to the scheduled meeting date.