



# Cleveland Astronomical Society

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

## Thursday, December 2, 2010 Meeting Announcement

6:15—7:00 p.m. – Get acquainted and snacks      7:00—7:45 p.m. – Buffet Dinner (Reservations Required)

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

Associate Professor of Physics and Astronomy

University of Pittsburgh

### The Quest for Gravitational Radiation

Einstein's Theory of Gravitation predicts that slight distortions of space-time can propagate as waves and carry energy. These waves are generated whenever mass accelerates, just as electromagnetic waves are generated whenever charge accelerates. However, gravitational waves have a vastly weaker interaction with matter than electromagnetic waves. In fact they are so weak that they never have been detected directly. This situation is likely to change over the next ten years, opening a new window into astronomy and providing a fundamental test of our theory of gravitation. Dr. Kosowsky will describe the basic idea behind gravitational waves, how to detect them, what they may reveal, and remarkable experiments now running or being planned.

**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.