



Cleveland Astronomical Society

www.clevelandastronomicalsociety.org

Thursday, February 5, 2009 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)

Speaker: Dr. Jon Bjorkman

Associate Professor of Physics and Astronomy
University of Toledo

“Gravitational Microlensing: Einstein’s Magic Telescope”

Many objects in the universe are not observable because they are small, dark, and/or very far away. However, Einstein’s Theory of General Relativity tells us that massive objects of any size will bend starlight, acting as cosmic magnifiers. When a massive object passes between us and a more distant luminous source, the source appears brighter due to the magnification by this “gravitational lens.” Gravitational lensing has been observed and is currently being used to study the nature of dark matter. Gravitational lenses provide extraordinary resolution, allowing us to investigate micro-arc second structures associated with the luminous background source. Dr. Jon Bjorkman will describe how microlensing has been used to place constraints on dark-matter halo of our Galaxy and to discover extra solar planets. He will also explore a new application that allows us to investigate the atmospheres and surrounding circumstellar matter of distant stars

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