



# Cleveland Astronomical Society

## Thursday, May 4, 2006 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

CAS Website (has map): [www.clevelandastronomicalsociety.org](http://www.clevelandastronomicalsociety.org)

### Speaker: Dr. Barbara Ryden

Department of Astronomy, Ohio State University

### “The Shape of Space”

The idea of curved space usually is associated with Einstein’s Theory of special Relativity. However, the idea that space might not be flat actually dates back to the early nineteenth century, long before Einstein’s birth. In principle, measuring the curvature of space requires simple geometric tests. In practice, putting these geometric tests into action requires twenty-first century technology. This technology is embodied in the *Wilkinson Microwave Anisotropy Probe (WMAP)* satellite. The *WMAP* observations of the Cosmic Microwave Background enable astronomers to measure the curvature of space on scales of billions of parsecs. Is space flat? Is it positively curved (like the surface of a sphere)? Or is it negatively curved (like a hyperboloid, a saddle-shape)? Come to this talk and learn the answer from Dr. Ryden.