Graduate Study in Astronomy/Astrophysics

www.physics.utoledo.edu

**Degrees offered:** M. S., M. S. E., Ph. D. in physics; concentrations in materials science; joint M. S. program with Electrical Engineering and Computer Science; Ph. D. concentration in medical physics offered jointly with the Medical College of Ohio

**Faculty:** 25 physics and astronomy (9 in astronomy/astrophysics), with an additional astrophysics position scheduled to be filled in fall 2006

**Astronomy/astrophysics course offerings:** stellar atmospheres, stellar interiors (two-semester sequence offered in alternate years) Galactic astronomy, extragalactic astronomy (two-semester sequence offered in alternate years); solar system; stellar spectra; general relativity; cosmology (one semester each, offered occasionally)

**Relevant campus research facilities:** 1-meter telescope with two spectrographs and CCD cameras; two Beowulf computer clusters, routine access to Ohio Supercomputer Center, Internet 2

**Research areas**

**Interstellar gas** Molecular cloud chemistry, cosmochemistry, laboratory astrophysics (Federman)

**Interstellar dust** Galactic and extragalactic; light scattering, photo luminescence (Witt)

**Stellar atmosphere theory** Stellar winds; circumstellar disks and envelopes (J. Bjorkman)

**Stellar spectroscopy and polarimetry** Be stars, Herbig Ae/Be stars, circumstellar disks and envelopes (K. Bjorkman); hot star atmospheres and winds; instrumentation (Morrison)

**Star formation** Infrared observations; Spitzer Space Telescope studies of young stars, brown dwarfs (Megeath, beginning April 2006)

**Administrative**

**For admission:** Undergraduate GPA 2.7 or better. Provide official transcript and 3 letters of recommendation. GRE General and Physics sections encouraged. **Deadline:** Completed applications for fall should be at the Graduate School by 15 January in order to be considered in the first round. **International students:** TOEFL $\geq$ 213, GRE General required.

**Assistantships:** Stipend is competitive. Tuition is waived.

**For more information and to apply:** www.physics.utoledo.edu

**Inquiries:** email Prof. Nancy Morrison (graduate committee chair) at ndm@astro.utoledo.edu