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 (7 + an emeritus in astronomy/astrophysics, plus a new faculty member scheduled to join in fall 2006 and another in fall 2007; additional retirement replacement hire anticipated for fall 2007)

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

Extragalactic astronomy Star clusters and star formation in galaxies (Chandar, beginning fall 2007)

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

Interstellar dust Galactic and extragalactic; light scattering, photoluminescence (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)

Administrative

For admission: Undergraduate GPA 2.7 or better; competitive. 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 ≥ 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

4 May 2006