Faculty & Scientists

**Chairperson:** Eileen Friel

**Professors:** Haldan N. Cohn, Eileen Friel, Phyllis M. Lugger, Stuart L. Mufson, Catherine A. Pilachowski, John J. Salzer

**Associate Professors:** Constantine P. Deliyannis, Katherine Rhode, Liese van Zee

**Assistant Professors:** Enrico Vesperini

**Research Scientists:** Samir Salim, Thomas Steiman-Cameron, Jonathan Thornburg

**Post Docs:** Jongsuk Hong, Jeremy Webb

Undergraduate Advising

Questions regarding the undergraduate programs or the department should be sent to the advisor or DUS, listed below:

Academic Advisor: Kathy Davis, Swain Hall West 244, kamdavis@indiana.edu

Director of Undergraduate Studies: Professor Constantine P. Deliyannis, cdeliyan@indiana.edu
Astronomy at Indiana University

The Astronomy Department at Indiana University maintains a full program of activities in research, teaching, and outreach. The department offers both an undergraduate major program leading to the B.S. degree in Astronomy & Astrophysics and a graduate program leading to the M.A. and Ph.D. degrees in Astronomy or Astrophysics. In addition, the department has range of introductory astronomy courses designed for students majoring outside of the sciences. There is also an Astronomy undergraduate minor program.

WIYN Observatory

Indiana University is a founding member of the WIYN Consortium which designed, constructed, and is now using a modern 3.5-meter telescope at Kitt Peak, about 50 miles southwest of Tucson AZ. IU has 25% of the observing time on the WIYN 3.5m, which we use partly by traveling to AZ and partly by remote observing from Bloomington. WIYN also operates a 0.9m telescope at Kitt Peak, that often complements the 3.5m science. IU’s share of the 0.9m is about 35%.

Major in Astronomy and Astrophysics

The program of study leading to the B.S. in Astronomy & Astrophysics has the following basic course requirements in Astronomy, Physics and Mathematics. For the details on distribution requirements, please consult the Bulletin, which is available from the College of Arts & Sciences or on the web at http://college.indiana.edu/undergrad/academicBulletin.shtml

Astronomy & Astrophysics majors begin the sequence of Physics and Math courses during the freshman year and may begin the Astronomy course sequence during either the freshman or sophomore year.

**Astronomy Courses:** A221, A222 (General Astronomy I & II), A305 (Observational Techniques), and two of A450 (Galactic Astrophysics), A451 (Stellar Astrophysics), A452 (Extragalactic Astrophysics), or A453 (Topical Astrophysics).

**Physics Courses:** P221, P222 (Physics I & II), P301 (Physics III), P331-P332 (Electricity and Magnetism I & II) and two of P441, P442 (Analytic Mechanics I & II) P453 or P454 (Introduction to Quantum Mechanics, Modern Physics).

**Mathematics Courses:** M211, M212, M311 (Calculus I, II, III), M343 (Introduction to Differential Equations I).

Students planning to study astronomy or astrophysics in graduate school are encouraged to take additional courses.

Minor in Astronomy and Astrophysics

A program leading to a minor in astronomy and astrophysics is provided for students who have a serious interest in the field but do not plan to major in the subject. To obtain a minor in astronomy and astrophysics, a student must take the following courses: A221, A222, physics P301, and two of A305, A320, A450, A451, A452, or A453. Altogether, these provide at least 17 credit hours. Students must take all necessary prerequisites, including some mathematics and physics courses. Students may substitute up to one 300/400-level astronomy course and/or P301 with other 300/400-level courses in related fields (for example, physics, mathematics, or computer science) with the specific permission of the astronomy department's Director of Undergraduate Studies. The cumulative GPA of all courses taken for the minor must be at least 2.000.

Departmental Honors Program

The honors program is designed for superior students who plan to pursue graduate studies in astronomy and astrophysics. Students wishing to pursue the honors program should contact the undergraduate advisor in the Department of Astronomy during the second semester of their sophomore year or first semester of their junior year. To be admitted to the honors program, students must have an overall GPA of 3.3 and a GPA of 3.3 in their astronomy, mathematics, and physics courses.