DEPARTMENT OF PHYSICS

Answering nature's most fundamental questions.

Majors: Physics, Physics in Medicine

You know their names—Galileo, Newton, Einstein, and Hawking. They, and scientists like them, explained gravity. They discovered radio waves, x-rays, radioactivity, electromagnetism, superconductivity, and the structure of the atom. And they invented radar, transistors, computers, lasers, MRI's, electron microscopes, nuclear power, and the Internet. They are physicists. And at the College of Science, you will learn to think like them; you will know some of what they knew. What might you explain, discover, or invent? Find out.

The Department of Physics offers you more than simply an education in physics; it offers a training ground for the mind, a first-class education in the art and science of problem solving.

Undergraduates work with world-class faculty in the University's excellent campus facilities, as well as in research facilities around the globe, including those in Japan and South America, at the Fermi and Argonne national laboratories in Illinois, and at the European Organization for Nuclear Research (CERN). Notre Dame is also part of an international consortium that funded and manages the Large Binocular Telescope (LBT) in Arizona. With two 8.4 meter diameter mirrors, the LBT is the world's most powerful telescope and one of its most advanced. Cutting edge research—research that is truly collaborative,

interdisciplinary, and international in scope—is carried out in: astrophysics nuclear physics, elementary particle physics, condensed matter and biophysics, atomic physics.

Physics majors choose between three concentrations:

- Advanced Physics
- Astrophysics
- Computing

With the research opportunities of a large university coupled with the environment of a smaller, private university, the Department of Physics offers a variety of programs to accommodate the academic and professional interests of its students.



Nuclear Accelerator

The first new accelerator for low-energy nuclear physics in the United States since the 1980s was recently installed at Notre Dame. The \$3.5 million NSF-sponsored project includes a 10-ton vertical tank.

