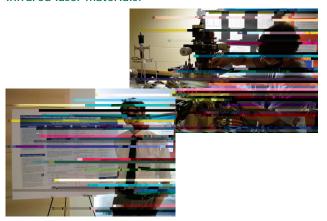
## THE PHYSICS DEPARTMENT

Our faculty's primary commitment is undergraduate education. Students experience challenging courses, hands-on laboratory work, and application of new technologies and computers in physics. Our small classes and laboratory sections are taught exclusively by faculty, not by graduate students; therefore our undergraduates enjoy the knowledge and support of experienced educators.

Recently, Loyola undergraduate students have worked on faculty-guided research involving high-speed atomic force microscopy, molecular dynamics of proteins, thin f Im overlayers, Casimir ef ect, neutrino physics, computational quantum mechanical methods, and infrared laser materials.



# WHY STUDY PHYSICS AT LOYOLA?

### WE OFFER:

- BA and BS degees that enable students to tailor the physics major to their interests. Students can take four years of an intensive physics program, or they can combine physics with another discipline, such as mathematics, biology, chemistry, engineering, communications, history, or business.
- A well-rounded liberal arts education that complements a strong major. Ef ective verbal and written communication is emphasized in all courses.
- Small classes taught by experienced faculty resulting in individualized attention from professors.
- Student summer research opportunities at Loyola and other institutions.
- Close interaction with students informs faculty in writing authentic letters of recommendation for physics majors.
- Guidance with placement in graduate schools, professional schools (medical school, law school), and industry upon graduation from Loyola.
- A highly active student body and many service opportunities locally, regionally, nationally, and internationally.

#### LOYOLA PHYSICS DEGREES

We of er a B.A. and a B.S. in physics, a biomedical physics minor, and a physics minor. We also have a combined B.S. and B.S.E. in engineering.

The B.A. enables students with broad interests to study physics and another discipline. A double major may be feasible. Physics can be combined with business, education, humanities, social sciences, or premedical work.

#### The B.S. has two tracks:

- 1. The Analytical Track is designed to prepare students for graduate studies in physics or another technical field.
- 2. The Applied Sciences Track facilitates applications of physics in disciplines such as medical physics, computational physics, mathematical physics, biophysics, and engineering physics.

The biomedical physics minor emphasizes applications of physics in medicine and the human body. We also of er a minor in physics.

#### CO-OPERATIVE PROGRAMS

The 5-year dual program in Physics/Engineering results in a B.S. in Physics and a B.S.E. in Engineering, both from Loyola.

The 3-2 Physics/Engineering program with Columbia University results in a B.S. in physics from Loyola and a B.S. in engineering from Columbia.

Study abroad programs are of ered in many countries in Europe, Asia, the Americas, and Australia.

Additional advanced courses are available through the Baltimore Student Exchange Program at several Baltimore-area universities, including the Johns Hopkins University.

# **PHYSICS**

LOYOLA UNIVERSITY MARYLAND

