

## *Undergraduate Study In: Physics*



The Idaho Accelerator Center

Choosing a university is an important decision, and selecting a major is equally important. Love for the discipline and a passion to learn are key factors in selecting a career path. It is also important to know there are satisfying professional opportunities available for graduates.

## **Undergraduate Programs in Physics**

The Department of Physics at Idaho State University offers the following undergraduate degrees:

- \* Associate of Science in Physics
- \* Associate of Science in Physics  
with a Health Physics Emphasis
- \* Bachelor of Arts in Physics
- \* Bachelor of Science in Physics
- \* Bachelor of Science in Physics  
with a Health Physics Emphasis
- \* Minor Field of Study in Physics

## **Job Outlook**

ISU physics students are regularly employed in technical positions at national laboratories and industry, in education, and in bio-science and applied physics careers. They find positions in Idaho, the surrounding states, and across the country. The Idaho National Engineering Laboratory, where a wide range of studies in pure and applied physics is carried out, employs many ISU physics graduates.

## **Who are the majors in our department?**

Students who have strong critical thinking and problem solving skills and enjoy applying them to a variety of practical and intellectual problems are often drawn to study physics. In the ISU Department of Physics, both undergraduate and graduate students are working on a range of issues including those in environmental monitoring, the effects of radiation, the properties of materials, accelerator physics and its applications to homeland security, and in fundamental particle physics.

A strong background in the fundamentals of how nature works enables the physics student to tackle a wide variety of problems. Those who wish to, can pursue advanced degrees that allow them access to research positions at industrial and national laboratories and faculty positions at universities.

## **Graduate Study**

Students who distinguish themselves in their undergraduate studies are excellent candidates for advanced degrees. At ISU, we offer:

- \*Ph.D in Applied Physics
- \*Master of Science
- \*Master of Natural Science

Both the Ph.D. and the Master of Science degrees can include a Health Physics emphasis.

# About the Department of Physics

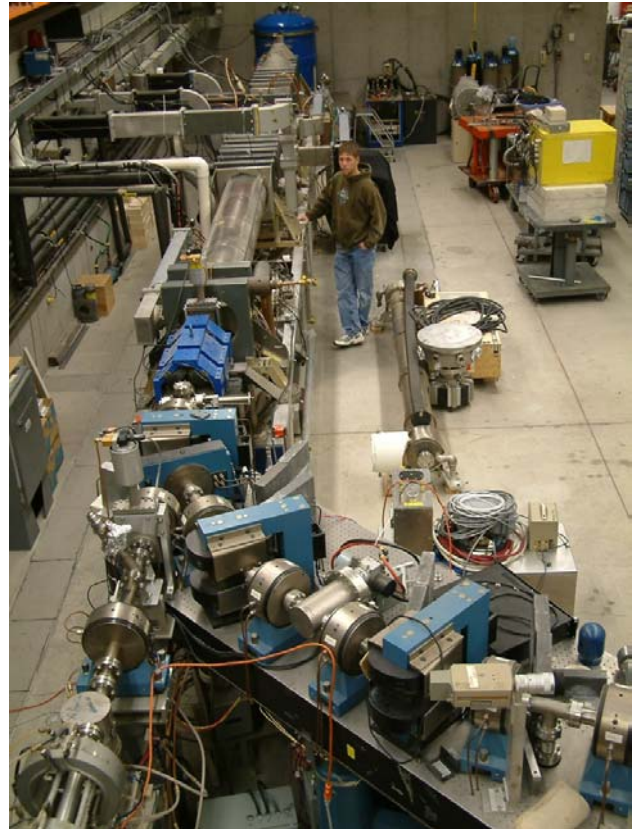
The Department of Physics at Idaho State University focuses on the use of nuclear techniques which are brought to bear on both fundamental and applied problems. We provide a rigorous and challenging curriculum as well as numerous opportunities for both undergraduate and graduate students to get involved in cutting edge research. Our Health Physics program provides a particularly unique opportunity for students interested in radiation health and safety.



One of two environmental monitoring laboratories in the Physical Sciences Building.

## Research Facilities

Students at the ISU Department of Physics get an education with a strong “hands on” emphasis. This is made possible by a large amount of state of the art scientific instrumentation. The Department enjoys a strong association with the Idaho Accelerator Center (IAC) which is a unique, on campus facility possessing more research accelerators than any other university in the world. These include eight electron linear accelerators ranging in energy from 6 to 8 million electron volts, a 2 million electron volt Van de Graaff accelerator, and a pulsed-power 10 million electron volt induction accelerator. Additional scientific laboratories can be found at the Pocatello airport where the technology to inspect cargo containers for the presence of nuclear weapons related materials is being developed. In the Physical Sciences Building there are two different environmental monitoring laboratories which perform low-level radionuclide analysis for the State of Idaho, the US Department of Energy, and other collaborators.



L- Band traveling wave linear accelerator at the Idaho Accelerator Center.



A “spark tree” produced by a rapid electrical discharge in plastic.

## Contact Us!

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