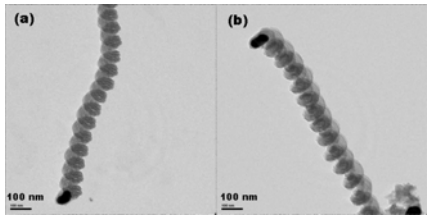
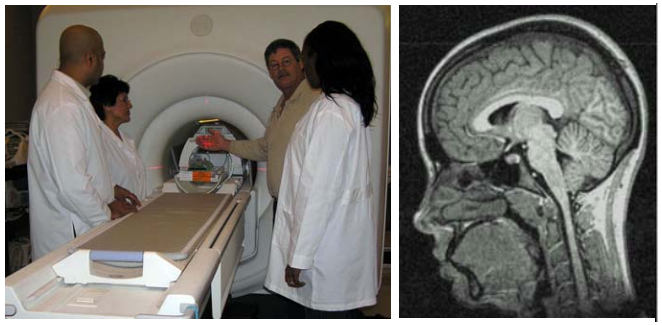
Students get hands-on experience working with faculty in the Strongly Correlated Electron Laboratory.



The Nanophysics Laboratory makes nanosprings from just a few atoms.

FACILITIES

We have argon ion lasers, several optical tables, evaporative and ion beam sputtering chambers, a Raman spectrometer, X-ray and gamma-ray spectrometers, optical cryostats, mass spectrometers, closed-cycle helium refrigerators, and computer and image-processing labs. Excellent electronics and machine shops enhance our experimental capabilities. Astronomy facilities include the Downing Planetarium and observatories both on and off campus.



The program in biomedical physics and neuroimaging is one of five similar programs in the U.S. Of the Fresno State physics graduates who applied to medical school in the past 30 years, 7 out of 8 were accepted—well above the national average of 1 in 3.

SCHOLARSHIPS and CAREERS

The Department of Physics offers seven partial scholarships for physics majors. Our graduates have had great success in achieving advanced degrees and in securing industrial positions. Physics majors have the versatility, knowledge, and analytical skills needed to adapt quickly to the opportunities that arise in the dynamic world of modern science and high technology.

Fresno State physics students and faculty in Yosemite National Park. We've made similar outings to Kings Canyon and Sequoia National Parks, also near Fresno.

FOR MORE INFORMATION

about our Graduate and Undergraduate programs, please contact:

Department of Physics
California State University, Fresno
2345 E. San Ramon Avenue, M/S MH37
Fresno, CA 93740-8031, U.S.A.

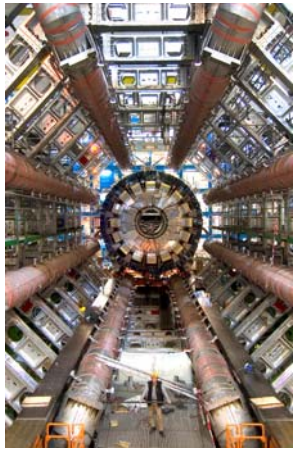
Phone: 559-278-2371
Fax: 559-278-7741
E-mail: nawright@csufresno.edu
Web: http://www.csufresno.edu/physics/

PHYSICS

AT

CALIFORNIA STATE UNIVERSITY, FRESNO

WWW.CSUFRESNO.EDU/PHYSICS/



The ATLAS detector at the Large Hadron Collider, the most powerful particle accelerator in the world

Stars forming in the Milky Way: Photo from the Campus Observatory by Fresno State student Michelle Meyers

THE FUNDAMENTAL SCIENCE

Physics is the fundamental science. It combines observation and experiment with creative synthesis to express the laws of nature, often elegant in their simplicity and universality. Einstein said: "They [the laws of nature] should form the basis from which a picture of all processes of nature can be derived by thoughtful deduction—and these include also the processes of life."

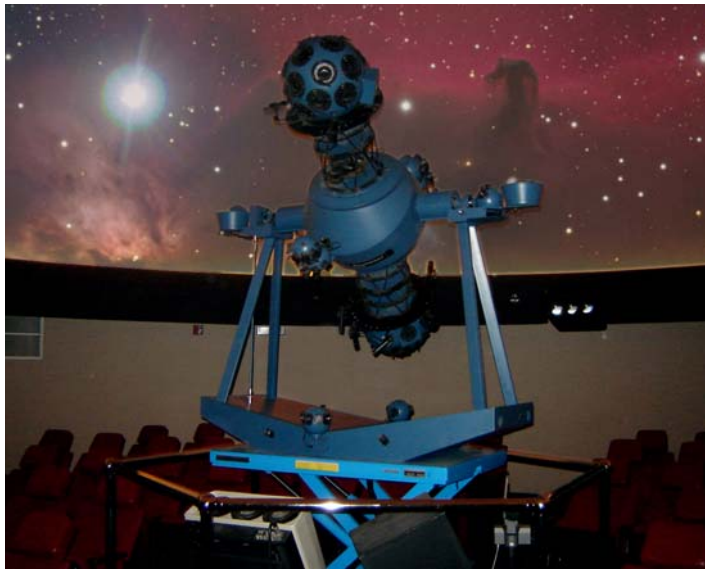
Physics includes the study of the fundamental particles, of nuclear, electromagnetic, and gravitational fields and forces, of energy, of light and optics, of heat, of electronics and the structure of materials, and of the Earth and the stars.

The Downing Planetarium

Department of Physics • California State University, Fresno

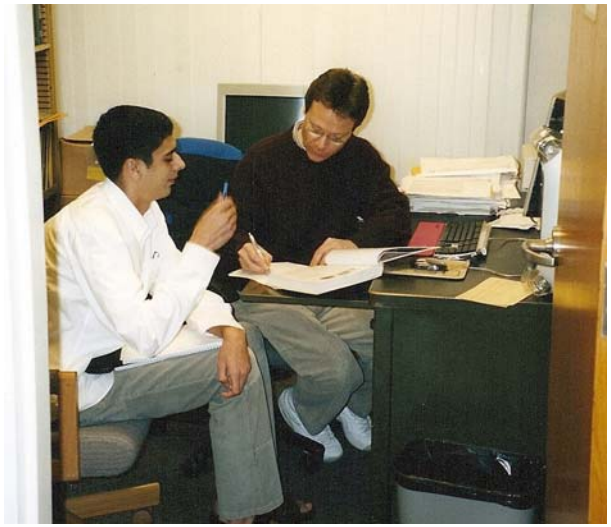
http://www.downing-planetarium.org

School and other group reservations: (559) 278-4071



The Downing Planetarium, featuring a 74-seat star theater, opened in 2000. It has been highly successful, with over 30,000 visitors per year. Physics students have opportunities to participate in planetarium operations. Next to it is the Campus Observatory, with a well-instrumented 16-inch telescope for classes and student research. A second 16-inch telescope, for research, is at an excellent dark-sky site in the Sierra Nevada Mountains. Although it is 47 miles from campus, we operate it by remote control from campus, over the Internet.

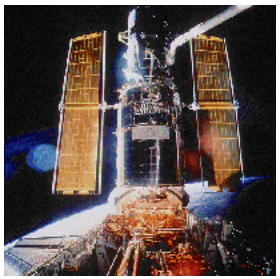
PHYSICS FACULTY	Ph.D. YEAR/INST.	RESEARCH INTERESTS
Manfred Bucher	1978/Frankfurt	Theoretical Solid State, Atomic Physics, Pedagogy
Yongsheng Gao	1995/UW-Madison	Experimental High-Energy Physics
Ray Hall	1994/UC Riverside	Experimental High-Energy Physics
Pei-Chun Ho	1997/UC San Diego	Experimental Strongly Correlated Electron Physics
Amir Huda	1998/UCLA	Biomedical Physics: Neuroimaging, Radiation Safety, NMR
Vanvilai Katkanant	1983/Nebraska	Laser Raman Spectroscopy, Lattice Dynamics, Ferroelectrics
Gerardo Muñoz	1990/Johns Hopkins	Classical and Quantum Field Theory, Gravitation
Frederick A. Ringwald	1993/Dartmouth	Observational Astronomy, Astronomical Instrumentation
Douglas Singleton	1994/Virginia	Theoretical Particle Physics, Non-Linear Field Theory
Charles Tenney	1997/UNC Chapel Hill	Biomedical Physics: Nuclear Medicine Instrumentation
Steven White	1994/UC Davis	Director, Downing Planetarium; Solid-State Physics
Daqing Zhang	2002/Idaho	Experimental Condensed Matter Physics: Nanophysics



Fresno State physics is a friendly environment in which students have ready access to faculty.

RESEARCH

Our faculty came here both to teach and to do research. Faculty research specialties, which provide opportunities for students, are in several areas. We offer both theoretical and experimental research. Current areas of interest include biomedical physics and neuroimaging, classical and quantum field theory, experimental and theoretical condensed matter physics, experimental high-energy physics, theory of gravitation, ground-based and space-based observational astronomy, experimental physics of strongly correlated electron phenomena such as superconductivity and magnetism, experimental nanophysics and nanotechnology, magnetic resonance spectroscopy, nuclear medicine, theoretical particle physics, and physics pedagogy.



California State University, Fresno faculty and students do research with world-class facilities, including *Hubble Space Telescope* (left) and the Large Hadron Collider near Geneva, Switzerland (right).