DEPARTMENT OF PHYSICS AND ASTRONOMY

Physics seeks to understand the fundamental workings of nature, from the constituents of matter deep within the nuclei of atoms, to the most distant galaxies of our expanding universe, to everyday phenomena of emergent complexity, self-organization and chaos. The resulting basic physical knowledge provides a firm foundation for innovations and is often the driving force of advanced technology. Computers, global positioning systems (GPS), the internet, lasers, magnetic resonance imaging (MRI) and other medical diagnostic tools, and space flight, along with many others, were all made possible by key advances in physics.

Physicists have a curiosity that thrives on the challenge of solving problems. Consistent with this, the physics program at Texas A&M strives to teach analytical thinking and quantitative problem-solving skills. This enables students to work productively in physics, in areas closely related to physics, and in a wide variety of areas outside of physics proper. Physicists can be found in almost any discipline that requires complex problem-solving skills. Some engage in cutting-edge research to increase our basic knowledge of the universe. Some apply new-found knowledge to make practical advances in the fields of computer science, medical science and engineering. Still others use their knowledge to advocate, advise, inform, instruct and administrate as lawyers, consultants, journalists/writers, teachers and managers.

The Department of Physics and Astronomy offers two undergraduate degree programs, a Bachelor of Arts and a Bachelor of Science, as well as minors in Astrophysics and Physics. The Department of Physics and Astronomy also offers Master of Science degrees in Astronomy and Physics, and Doctor of Philosophy degrees in Applied Physics, Astronomy and Physics.

The faculty members of the department carry out theoretical and experimental research in the areas of astronomy and astrophysics, atomic, molecular and optical physics, computational physics, cosmology, high-energy and elementary particle physics, condensed matter physics and materials science, nuclear physics and quantum optics. During the course of their undergraduate experience at Texas A&M, Physics majors have the opportunity to work with faculty in all of these areas.

Faculty

Abanov, Artem G, Associate Professor
Physics & Astronomy
PHD, Texas A&M University, 1998

Agnolet, Glenn, Professor
Physics & Astronomy
PHD, Cornell University, 1983

Akimov, Alexey, Assistant Professor
Physics & Astronomy
PHD, Moscow Institute of Technology, 2003

Allen, Roland E, Professor
Physics & Astronomy
PHD, University of Texas at Austin, 1969

Bassichis, William H, Professor
Physics & Astronomy
PHD, Case Western Reserve University, 1963

Becker, Katrin, Professor
Physics & Astronomy
PHD, University of Bonn, 1994

Becker, Melanie, Professor
Physics & Astronomy
PHD, University of Bonn, Germany, 1994

Belyanin, Alexey A, Professor
Physics & Astronomy
PHD, Institute of Applied Physics Russian Academy of Sciences, 1995

Chin, Siu A, Professor
Physics & Astronomy
PHD, Massachusetts Institute of Technology, 1975

Christian, Gregory A, Assistant Professor
Physics & Astronomy
PHD, Michigan State University, 2011

Depoy, Darren L, Professor
Physics & Astronomy
PHD, University of Hawaii at Manoa, 1987

Dutta, Bhaskar, Professor
Physics & Astronomy
PHD, Oklahoma State University, 1995

Erukhimova, Tatiana L, Instructional Associate Professor
Physics & Astronomy
PHD, Institute of Applied Physics, Russian Academy of Sciences, 1999

Eusebi, Ricardo, Associate Professor
Physics & Astronomy
PHD, University of Rochester, 2006

Finkelstein, Alexander, Professor
Physics & Astronomy
PHD, Lauda Institute for Theoretical Physics, 1972

Ford, Albert L, Professor
Physics & Astronomy
PHD, University of Texas at Austin, 1972

Fries, Rainer J, Associate Professor
Physics & Astronomy
PHD, University of Regensburg, Germany, 2001

Fry, Edward S, University Distinguished Professor
Physics & Astronomy
PHD, University of Michigan, 1969

Gagliardi, Carl A, Professor
Physics & Astronomy
PHD, Princeton University, 1982

Holt, Jeremy W, Assistant Professor
Physics & Astronomy
PHD, Stony Brook University, 2008
Kamon, Teruki, Professor  
Physics & Astronomy  
PHD, University of Tsukuba, 1986

Katzgraber, Helmut G, Professor  
Physics & Astronomy  
PHD, University of California-Santa Cruz, 2001

Kennicutt, Robert Charles, Professor  
Physics & Astronomy  
PHD, University of Washington, 1978

Ko, Che-Ming, Distinguished Professor  
Physics & Astronomy  
PHD, State University of New York at Stony Brook, 1973

Kocharovskaya, Olga A, University Distinguished Professor  
Physics & Astronomy  
PHD, Institute of Applied Physics, Russian Academy of Sciences, 1986

Kocharovsky, Vitaly V, Professor  
Physics & Astronomy  
PHD, Institute of Applied Physics, Russian Academy of Sciences, 1986

Krisiunas, Kevin L, Instructional Assistant Professor  
Physics & Astronomy  
PHD, University of Washington, 2000

Lee, David M, Distinguished Professor  
Physics & Astronomy  
PHD, Yale University, 1959

Lyuksyutov, Igor F, Professor  
Physics & Astronomy  

Macri, Lucas M, Professor  
Physics & Astronomy  
PHD, Harvard University, 2001

Mahapatra, Rupak K, Professor  
Physics & Astronomy  
PHD, University of Minnesota, 2000

Marshall, Jennifer L, Assistant Professor  
Physics & Astronomy  
PHD, Ohio State University, 2006

Mason, John D, Instructional Assistant Professor  
Physics & Astronomy  
PHD, Texas A&M University, 2016

McIntyre, Peter M, Professor  
Physics & Astronomy  
PHD, University of Chicago, 1973

Melconian, Daniel G, Associate Professor  
Physics & Astronomy  
PHD, Simon Fraser University, 2006

Mioduszewski, Saskia, Professor  
Physics & Astronomy  
PHD, University of Tennessee, 1999

Mirabolfathi, Nader, Research Associate Professor  
Physics & Astronomy  
PHD, University of Paris XI, 2002

Naugle, Donald G, Professor  
Physics & Astronomy  
PHD, Texas A&M University, 1965

Papovich, Casey J, Professor  
Physics & Astronomy  
PHD, Johns Hopkins University, 2002

Pokrovsky, Valery, University Distinguished Professor  
Physics & Astronomy  
PHD, Tomsk State University, 1957

Pope, Christopher N, University Distinguished Professor  
Physics & Astronomy  
PHD, University of Cambridge, 1980

Rapp, Ralf F, Professor  
Physics & Astronomy  
PHD, Rheinische Friedrich-Wilhelma University, Bonn, 1996

Rogachev, Grigory V, Professor and Head  
Physics & Astronomy  
PHD, National Research Centre, 1999

Ross Jr, Joseph H, Professor  
Physics & Astronomy  
PHD, University of Illinois at Urbana-Champaign, 1986

Safonov, Alexei N, Professor  
Physics & Astronomy  
PHD, University of Florida, 2001

Saslow, Wayne M, Professor  
Physics & Astronomy  
PHD, University of California - Irvine, 1968

Schuessler, Hans A, Professor  
Physics & Astronomy  
DOC, Universitat Heidelberg, 1964

Scully, Marlan O, University Distinguished Professor  
Physics & Astronomy  
PHD, Yale University, 1966

Sezgin, Ergin, Professor  
Physics & Astronomy  
PHD, State University of New York at Stony Brook, 1980

Sokolov, Alexei V, Professor  
Physics & Astronomy  
PHD, Stanford University, 2001

Strigari, Louis E, Assistant Professor  
Physics & Astronomy  
PHD, Ohio State University, 2005

Suntzeff, Nicholas B, University Distinguished Professor  
Physics & Astronomy  
PHD, University of California - Santa Cruz, 1980
Teizer, Winfried, Professor
Physics & Astronomy
PHD, University of Massachusetts - Amherst, 1998

Toback, David, Professor
Physics & Astronomy
PHD, University of Chicago, 1997

Tran, Kim-Vy H, Professor
Physics & Astronomy
PHD, University of California, Santa Cruz, 2002

Tribble, Robert E, University Distinguished Professor
Physics & Astronomy
PHD, Princeton University, 1973

Walsh, Jonelle L, Assistant Professor
Physics & Astronomy
PHD, University of California, Irvine, 2011

Wang, Lifan, Professor
Physics & Astronomy
PHD, University of Science and Technology of China, 1993

Webb, Robert C, Professor
Physics & Astronomy
PHD, Princeton University, 1972

Weimer, Michael B, Professor
Physics & Astronomy
PHD, California Institute of Technology, 1986

Welch, George R, Professor
Physics & Astronomy
PHD, Massachusetts Institute of Technology, 1989

Wu, Wenhao, Associate Professor
Physics & Astronomy
PHD, University of Chicago, 1992

Zheltikov, Alexey M, Professor
Physics & Astronomy
PHD, M.V. Lomonosov Moscow State University, 1990

Zubairy, Muhammad S, University Distinguished Professor
Physics & Astronomy
PHD, University of Rochester, 1979

**Majors**

- Bachelor of Arts in Physics (http://catalog.tamu.edu/undergraduate/science/physics-astronomy/physics-ba)
- Bachelor of Science in Physics (http://catalog.tamu.edu/undergraduate/science/physics-astronomy/physics-bs)

**Minors**