Physics

Research opportunities in theoretical/computational physics are available in astrophysics, biophysics, chaos, condensed matter, nanoscience/nanomaterials, nuclear and particle physics, quantum computing, and relativity. Research opportunities in experimental physics are available in astronomy, atomic and molecular physics, biophysics, emergent phenomena, materials physics, nanoscale science, nonlinear systems, nuclear and particle physics, optics, soft-condensed-matter physics and technology, and surface physics.

Degrees earned will be distributed as: “Master of Science” and “Doctor of Physics” without specialization specifications.

Admission Requirements

Bachelor's degree in physics or equivalent and related. General GRE and the GRE Physics subject test are accepted, but not required.

Master's Degree Requirements

A minimum of 30 credit hours beyond the Bachelor's degree with mastery of aspects of the physics curriculum. There are 2 options:

- Option A: Earning 24 credit hours of courses, 6 of research, writing a dissertation, and passing an oral exam;
- Option B: Earning 30 credit hours of courses and passing the physics qualifying exam.

Doctoral Degree Requirements

A minimum of 72 credit hours beyond the Bachelor's degree (54 with an incoming Master's); demonstrating mastery of the core physics curriculum as evidenced by passing the qualifying exam; demonstrating mastery of research in a subspecialty of physics by passing appropriate elective courses, planning a research topic, passing an oral preliminary exam, writing a dissertation, and passing a final oral defense.

Student Financial Support

Graduate teaching assistantships are available for new and continuing students. Research assistantships are available to continuing students and occasionally to new students. More than 95% of students are supported by assistantships.

Degrees

- Physics (MS) (http://catalog.ncsu.edu/graduate/sciences/physics/physics-ms/)
- Physics (PhD) (http://catalog.ncsu.edu/graduate/sciences/physics/physics-phd/)
- Physics (Minor) (http://catalog.ncsu.edu/graduate/sciences/physics/physics-minor/)

Faculty

- Harald Ade
- David E. Aspnes
- Robert J. Beichner
- Jerzy Bernholc
- John Michael Blondin
- John D. Brown
- Laura I. Clarke
- Karen E. Daniels
- William L. Ditto
- Daniel B. Dougherty
- Carla Frohlich
- Robert Golub
- Kenan Gundogdu
- Hans D. Hallen
- Paul R. Huffman
- Chueng Ryong Ji
- James P. Kneller
- Gail C. McLaughlin
- Lubos Mitas
- Robert Riehn
- Christopher M. Roland
- Maria C. Sagui
- Thomas M. Schaefer
- John E. Thomas
- Mithat Unsal
- Keith R. Weninger
- Albert R. Young
- Matthew Piron Green
- Alexander Kemper
- Divine Philip Kumah
- Shuang Fang Lim
- Richard Leigh Longland
- Hong Wang
- Julio Monti Belmonte
- Rongmon Bordoloi
- Mary Williard Elting
- Sebastian Konig
- Sharonda Leblanc
- Katherine Jean Mack
- Vladimir Skokov
Dali Sun
Jason Russell Bochinski
Kazimierz Borkowski
Abay Dinku
Daniel Jacob Doucette
Brand Irving Fortner
Keith Heyward
Parminder Kaur
John H. Kelley
Hayen Leendert
Kent Leung
Wenchang Lu
Vijaya Mehta
Zodiac T. Webster
Ruth W. Chabay
Kwong T. Chung
James W. Cook Jr.
Stephen R. Cotanch
William Robert Davis
Donald C. Ellison
Raymond Earl Fornes
Christopher Robert Gould
David G. Haase
Karen L. Johnston
Fred Lado Jr.
Jacqueline Krim
George W. Parker III
Richard R. Patty
Stephen Reynolds
Phillip J. Stiles

**Associate Professor**
Ian Roederer

**Assistant Professor**
Xingcheng Lin

**Teaching Professor**
Aaron Titus

**Teaching Assistant Professor**
Kasey Wagoner