# **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.

### **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.

#### More Information

Physics Program Website (http://physics.sciences.ncsu.edu/)

# **Admission Requirements**

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

# **Applicant Information**

• Delivery Method: On-Campus • Entrance Exam: None

• Interview Required: Yes

# **Application Deadlines**

Please see program website (https://physics.sciences.ncsu.edu/graduate/apply/) for application deadlines.

# **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

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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** 

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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 Professors**

Weijian Chen

Raja Ghosh

Xingcheng Lin

Ruijuan Xu

### **Teaching Professor**

Aaron Titus

### **Teaching Assistant Professors**

Maya Kinley-Hanlon

Kasey Wagoner

#### Lecturer

Federico Portillo Chaves