

# PHYSICS, MS

## DEPARTMENT OVERVIEW

The Department of Physics has a strong tradition of graduate study and research in astrophysics; atomic, molecular, and optical physics; condensed matter physics; high energy and particle physics; plasma physics; quantum computing; and string theory. There are many facilities for carrying out world-class research (<https://www.physics.wisc.edu/research/areas/>). We have a large professional staff: 45 full-time faculty (<https://www.physics.wisc.edu/people/staff/>) members, affiliated faculty members holding joint appointments with other departments, scientists, senior scientists, and postdocs. There are over 175 graduate students in the department who come from many countries around the world. More complete information on the graduate program, the faculty, and research groups is available at the department website (<http://www.physics.wisc.edu>).

Research specialties include:

### THEORETICAL PHYSICS

Astrophysics; atomic, molecular, and optical physics; condensed matter physics; cosmology; elementary particle physics; nuclear physics; phenomenology; plasmas and fusion; quantum computing; statistical and thermal physics; string theory.

### EXPERIMENTAL PHYSICS

Astrophysics; atomic, molecular, and optical physics; biophysics; condensed matter physics; cosmology; elementary particle physics; neutrino physics; experimental studies of superconductors; medical physics; nuclear physics; plasma physics; quantum computing; spectroscopy.

## MS DEGREES

The department offers the master science degree in physics, with two named options: Research and Quantum Computing. The MS Physics-Research option (<http://guide.wisc.edu/graduate/physics/physics-ms/physics-research-ms/>) is non-admitting, meaning it is only available to students pursuing their PhD. The MS Physics-Quantum Computing option (<http://guide.wisc.edu/graduate/physics/physics-ms/physics-quantum-computing-ms/>) (MSPQC Program) is a professional master's program in an accelerated format designed to be completed in one calendar year.