Graduate Studies in Physics

Study and Research Programs leading to the Ph.D. Degree

Principal Areas of Research

Astrophysics and Space Sciences
- X-ray and gamma-ray astronomy
- Formation and evolution of the solar system
- Cosmic rays and high energy neutrinos
- Astroparticle physics and cosmology

Biological and Biomedical Physics
- Biophysics of computation in brains
- Dynamics of biopolymers in cells
- Magnetic resonance imaging
- Ultrasound imaging and tissue characterization

Condensed Matter, Materials Physics and Atomic, Molecular & Optical Physics
- Liquids, glasses, and quasicrystals
- Quantum information and quantum optics
- Physics of atomically-thin materials
- Electronic properties of materials
- Strongly correlated systems & topological phases
- Physics at ultrahigh pressures

Nuclear and Particle Physics
- Dark matter and physics beyond the standard model
- Lattice gauge theory and quantum chromodynamics
- Ultra-dense matter in neutron stars
- Parity-time symmetric quantum mechanics

Fellowship Opportunities

More information:

physics.wustl.edu