PHYS 4000 Quantum and Atomic Physics

4 hours

Majors, Minors & Degrees:

Majors
Physics (B.S.)

Departments/Programs:

Physics, Astronomy, and Computer Science

An introduction to the Schrodinger equation and its solution. Topics studied include the 1D infinite square well, simple harmonic oscillator potential, and finite rectangular well/barrier, and the hydorgen atom, including the theory of angular momentum. Theories of atomic scattering will also be explored.
Three lectures per week.
One recitation per week.
Prerequisite(s): PHYS 2400 Introduction to Modern Physics and MATH 2600 Calculus III or MATH 3100 Differential Equations and computer programming skills or permission of the instructor.
(Normally offered alternate spring semesters.)