PHYSICS 557 – Elementary Particle Physics – Fall 2007

Time: MWF 12:50 – 1:45
Place: Physics P-128

Recommended Preparation: Non-Relativistic Quantum Mechanics and Special Relativity.
Instructor: Prof. C. McGrew
Office Hours: TT 12:30 – 1:30

Physics 557 is an introductory course in elementary particle physics. The course textbook will be Quarks and Leptons (Halzen & Marten, Wiley 1984).

- Symmetries and Groups
- Particle Detectors and the Passage of Particles through Materials
- Introductory QED
- Introductory QCD
- Electro Weak Interactions
- The Standard Model and Gauge Theories

Recommended Texts

- Halzen and Marten, Quarks and Leptons, (Wiley 1984)
- Griffiths, Introduction to Particle Physics (Wiley 1987)
- Kane, Modern Elementary Particle Physics (Westview, 1993)