Physics 8810  Particle physics  Winter 2010

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Office hours: 10am - 11am MTh, and by appointment.
Texts: Halzen and Martin, *Quarks and leptons* – main textbook; Perkins, *Introduction to high energy physics*;
Okun, *Leptons and quarks*; Close, *Quarks and partons*;
Grading: 65% for the homework, 35% presentations.
Homework: assigned weekly and collected on a week later. Late homework will not be accepted.

Course outline

1. **Preview.** Types of interactions. Units. Scales.


4. **Electrodynamics of spin 1/2 particles.**


6. **Multiparticle production.** Diffraction. Fragmentation and central regions.


9. **Quantum chromodynamics.**