

### Assignments for Week 13

Date	Reading	Assigned Problems
Tuesday Apr. 17	Regular Supplement Chapter 9	2, 5, 6, 7, 8, 10, 11, 12, 13, 14abc, 15
Thursday Apr. 19	Regular Supplement Chapter 10	1a, 2, 3, 5, 6, 7, 8, 9, 10
Monday Apr. 23	<b>Hand-In Set #10</b>	A83; <b>Supp CH 9:</b> 3, 4, 14def, 16 <b>Supp CH 10:</b> 1b, 4, 11, 12 <b>X4</b> (see below)

**X4** (Throw-back problem.) In PHYS 211 you did a lab in which you used real data to analyze an elementary particle collision

$$\pi^- + p \longrightarrow \pi^- + \pi^+ + X,$$

where  $X$  was an unknown particle, and the momentum of the incoming  $\pi^-$  was  $0.921 \text{ GeV}/c$ , and the proton ( $p$ ) was at rest.

Repeat your calculation of the mass of the unknown particle. If you have your lab notebook and spreadsheet, you may use them, but be sure to explain in writing what did.