Assigned on March 1, 2016.

Remember, you can volunteer to explain any of these at the board. You don’t need to work them all out, these are the problems most closely related to the recent lectures.

Problems in Jackson’s 3rd ed.:

11.3 Using two successive Lorentz transformations to get velocity addition law
11.4 Clock design using a reflecting light beam
11.5 Lorentz transformation of accelerations
11.6 Twin paradox and time dilation
11.8a Speed of light in a moving liquid
11.10 Matrices associated with boosts and rotations