

HOMEWORK 8

Due: Tuesday, April 11

Problems: Relativistic Mechanics

(Griffiths, Section 12.2)

12.25; 12.28; and 12.30

Problem 8

Two particles with relativistic energies E_1 and E_2 and relativistic momenta p_1 and p_2 are moving in the frame K along the X -axis in opposite directions. Determine the velocity V_p of the frame K' in which the total momentum of two particles is zero. Calculate the relativistic energies on these particles in the K' frame.