

Physics 721 Homework 2

Assigned: Mon. 1/24/05

Due: Mon. 1/31/05

1. Show that

$$\Delta x'^{\mu} \Delta x'_{\mu} = \Delta x^{\mu} \Delta x_{\mu}$$

under a general Lorentz transformation (Eq. 11.19 of Jackson).

2. Jackson 11.5
3. Jackson 11.6
4. Jackson 11.14 a) and b) only.
5. Jackson 12.1
6. How much time did you spend on doing the homework?