Massachusetts Institute of Technology

Department of Physics

Course: 8.701 – Introduction to Nuclear and Particle Physics

Term: Fall 2020

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Discussion Problems

from recitation on October 7th, 2020

Problem 1:

Show that the adjoint spinor \bar{u} and \bar{v} satisfy $\bar{u}(\gamma^{\mu}p_{\mu}-m)=0$ and $\bar{v}(\gamma^{\mu}p_{\mu}+m)=0$.

Problem 2:

Show that the normalization condition simplifies to $\bar{u}u = -\bar{v}v = 2m$.

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