# 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 $\bar{u}\left(\gamma^{\mu} p_{\mu}-m\right)=0$ and $\bar{v}\left(\gamma^{\mu} p_{\mu}+m\right)=0$.

## Problem 2:

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

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