

Oberlin College Physics 212, Fall 2021

## Assignment 2:

# Energy and Momentum in Relativity

Wednesday, 13 October

*Take-home exam* instead of problems next week. The take-home exam will cover relativity.

*Reading:* Continue reading about relativistic energy and momentum in the notes and, if necessary, in the recommended books.

*Problems:* Due at 11:00 AM on Wednesday, 20 October. These problems are from the “Notes on Relativistic Dynamics”.

1. Notes problem 2.4: *Relativistic energy and momentum, I*
2. Notes problem 4.1: *Sticky particles*
3. Notes problem 4.3: *Sticky particles and the classical limit*
4. Notes problem 5.4: *Sticky particles, II*

In addition, be sure to look at (but don't turn in) Notes problem 6.10, *Nuclear fission, II*.