## PHY4222 Mechanics 2 Spring Term 2024 Homework Problem Set 9

Due Wednesday April 17, 11:59 pm.

Reading: Chapter 15 Special Relativity. Sections 15.8, 15.9, 15.12, 15.13, 15.18.

<u>Problem 1.</u> Rapidity. Problem 15.30★ from the textbook.

<u>Problem 2.</u> Scalar product of four-momenta. Problem 15.36★ from the textbook.

**Problem 3.** Four-momenta of particles. Problem 15.53\*\* from the textbook.

Problem 4. Lorentz invariance in E&M. Problem 15.101★ from the textbook.

Problem 5. No more HW after this one! Problem 15.107\*\* from the textbook.