

Special Relativity and Waves (171.201/171.207) Fall 2008

1. Overview:

Special Relativity and Waves is the third course in the four-semester introductory sequence for physics majors. The course is divided into two parts. In the first three weeks we study the theory of special relativity (this is where 171.207 course ends after the first midterm and relevant homework). Then the rest of the semester is devoted to the physics of waves (for those who take the full course 171.201). The course builds upon the background in classical mechanics and electromagnetism, and precedes the full development of quantum physics.

2. Lecture Schedule:

Lectures: Mon/Wed/Fri, 11–11:50am (see calendar for exceptions), Bloomberg 278

Instructor: Prof. Andrei Gritsan

Office hours: Wed 3-5pm, Bloomberg 433, email [gritsan\(at\)jhu.edu](mailto:gritsan(at)jhu.edu)

3. Section Schedule:

Section 1: Damien Benveniste (Teaching Assistant): Thu, 1:30–2:20pm, Bloomberg 278

Office hours: Mon 2-4pm, Bloomberg 321, email [dbenveni\(at\)pha.jhu.edu](mailto:dbenveni(at)pha.jhu.edu)

Section 2: Sandip Biswas (Teaching Assistant): Thu, 1:30–2:20pm, Bloomberg 274

Office hours: Tue 4-5pm, Wed 3-4pm, Bloomberg 467, email [sbiswas\(at\)pha.jhu.edu](mailto:sbiswas(at)pha.jhu.edu)

4. Grade policy:

20% homework assignments (weekly, see calendar)

20% 1st midterm (October 10, tentative)

20% 2nd midterm (November 14, tentative)

40% final exam (December 17, 9-noon)

Grader: Andrew Whitbeck (Teaching Assistant)

Office hours: Tue 11am-1pm, Bloomberg 409, email [whitbeck\(at\)pha.jhu.edu](mailto:whitbeck(at)pha.jhu.edu)

Late homework: between Mon 11:50am and Wed 5pm penalty 50% if TA accepts

5. Website:

<http://www.pha.jhu.edu/~gritsan/2008.171.201/>

<http://www.pha.jhu.edu/~gritsan/2008.171.207/>

6. Required texts:

Main textbook (first part): "Introduction to Special Relativity"

Author: Robert Resnick

Published: John Wiley and Sons

Main textbook (second part): "The Physics of Vibrations and Waves," 6th edition

Author: H. J. Pain

Published: John Wiley and Sons