

Oberlin College Physics 111, Spring 2024

Assignment 6

Monday, 11 March

Reading: By Friday, read LSM chapter 11 (“Magnetic Forces and Fields”) and chapter 12 (“Sources of Magnetic Fields”). Deemphasize sections 11.5, 11.7, 12.2, 12.3, and 12.4. Omit section 12.7 altogether.

Laboratory: Finish off “DC Circuits”.

Guest Lecture and Lunch: On Monday, 18 March, at 4:35 pm, Stephan Wielandy will speak on “Using Your Physics Degree for Interplanetary Laser Communications” in Wright 201 (our classroom). Dr. Wielandy will also chat informally at a pizza lunch on Tuesday, 19 March at 12:15 pm in Wright 209. If you attend either lecture or lunch or both and submit to me a one-paragraph description (on paper, on Wednesday, 20 March), you will be awarded 20 extra-credit problem-set points (40 points for both). (Hand in a different sheet of paper for this description and for your problem assignment due the same day.)

Problems: Due Wednesday, 20 March.

- 39: *An application for RC circuits*
- 40: *Television*
- 41: *Protective shield against charged bullets*
- 43: *Primitive motor*
- 45: *An island in the stream*
- 49: *Infinite sheet of current*