Private Reading, Fall 2024

Assignment 10

Reading: Griffiths chapter 9 on light ("Electrodynamic Waves").

Also *Notes on Electrodynamics* chapter 5, "Electromagnetic Waves".

Problems: Due Thursday, 14 November.

- Griffiths 7.2: *Energy in capacitor discharge*
- Griffiths 7.34: *Charging a capacitor*
- Griffiths 8.2: *Energy in charging a capacitor*
- Griffiths 7.63: *Alfven's theorem*
  This theorem is used frequently in plasma and solar physics. Honors exams have not infrequently included this problem.
- Griffiths 8.19: *Thomson's dipole*
  Can you produce any sort of qualitative argument to understand why this angular momentum should be independent of d?