## Phys 586 Homework

## Problem Set 2

Due Wednesday, February 10

- 1. Knoll 8.9
- 2. Knoll 9.2 and estimate the total transit time for a 10 stage PMT.
- 3. Knoll 9.8
- 4. The number of photoelectrons emitted from a photocathode is Poisson distributed. The QE of a typical PMT is 25%. How many incident photons on a PMT are needed to make a measurement with 1% inefficiency?