

PHYS 399, Homework #4
Due Monday, May 18, start of class.

Key Concepts

- Binomial Distribution
- Poisson Distribution

Reading: Taylor Chapters 10-11

Homework Problems (taken from Taylor):

1. Problem 10.11
2. Problem 10.14
3. Problem 10.16 - Calculate this by hand or using MATLAB, whichever you prefer.
4. Problem 10.18
5. Problem 11.3
6. Problem 11.9
7. Problem 11.10
8. Problem 11.20 - Answer the question "significant evidence" quantitatively both in terms of a number of standard deviations, as well as the probability that this was simply a statistical fluctuation in the background rate.