Physics 343 Lecture # 4:
Lab # 2 + Statistics

Lab # 2: more observations of the Sun...

First part of lab: measure the aperture efficiency of the SRT.

Second part of lab: assess level of solar variability.

First part: use one of your section's Lab 1 datasets, unless you decide you need new data.

Second part: unless we have good progress with the telescope, you will again (a) use simulation mode to create script fragments that would be run Th/Fr/Sa/Su/Mo, and (b) be sent equivalent archival data.

Some details about the SRT

Digital receiver modes:

- **1 = 500 kHz bandwidth, 64 channels (default)**
- **2 = 250 kHz bandwidth, 64 channels**
- **3 = 125 kHz bandwidth, 64 channels**
- **4 = 1218.75 kHz bandwidth, 156 channels**

Current calibration scheme: raw data in instrument counts are automatically multiplied by "calcons" = 1.0 (vs. 0.12 from earlier) to obtain antenna temperatures in K. SRT software reports this antenna temperature on screen and in output files.

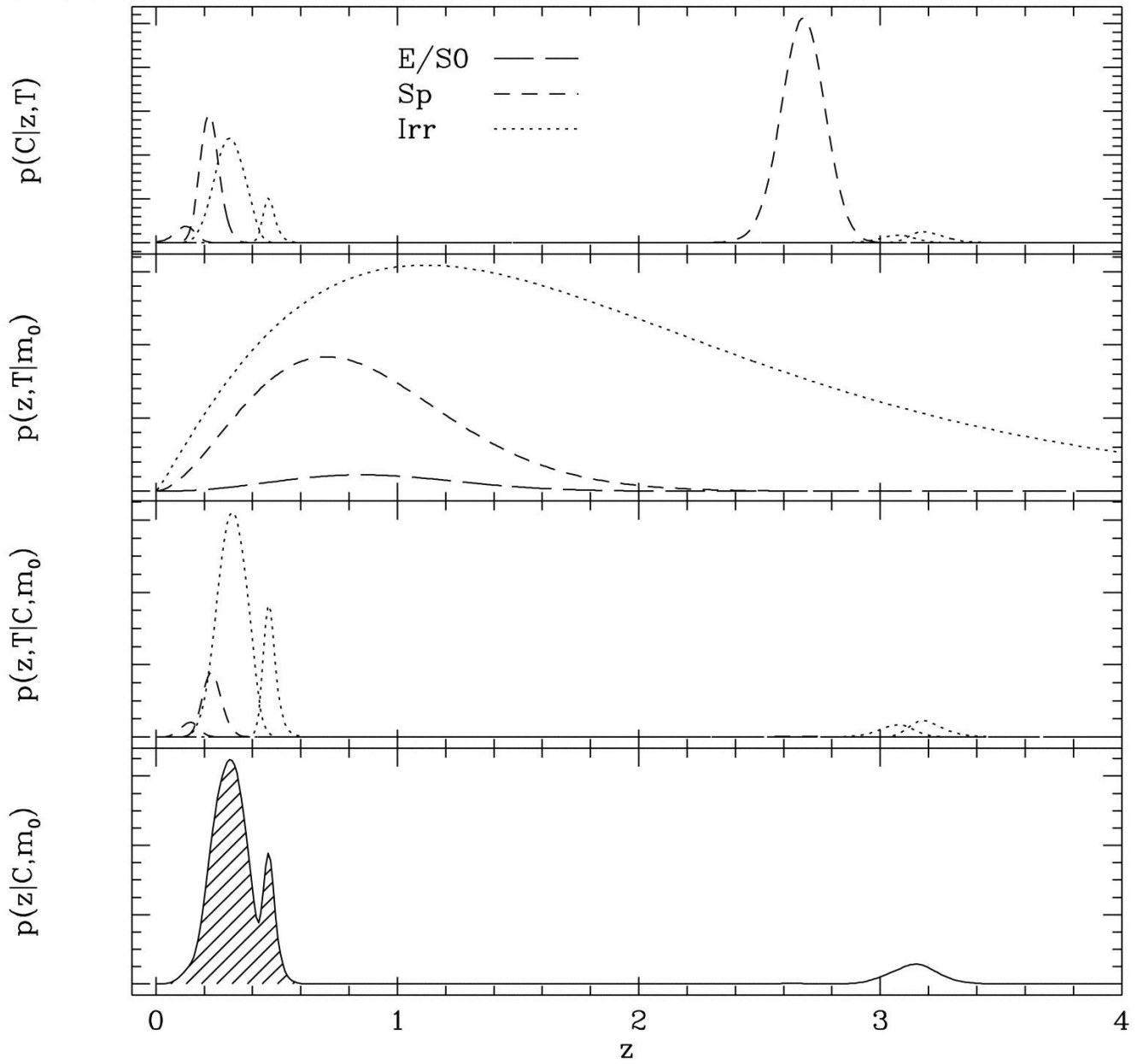
Example: Bayesian redshift estimation

C = observed colors

z = redshift

T = type/template

m_0 = magnitude



Benitez (2000)

Quiz