

ASTR 680 Practice questions for lecture 24: Gamma-Ray Bursts

1. One of the main drivers of GRB models is the total energy release. If that total energy is 10^{51} ergs, and the energy has to be released in milliseconds to seconds, there aren't many candidates! We've talked about two possibilities: core-collapse supernovae and a NS-NS or NS-BH merger. What other candidates can you list?
2. Suppose that you can identify the redshift of a short GRB (from the electromagnetic emission) and that you also have a clear detection of the gravitational waves. What inferences could you make from the combination of those bits of information that you could not make from either separately?