Practice questions for lecture 22: Measurements of neutron star masses

1. We say in the notes that some "ordinary" stars (by which we mean stars on the main sequence) have spectra that are reasonably well-represented by blackbodies. Is this true of all such stars? Look up the broadband spectra of a variety of main sequence stars to see whether this holds.

2. One post-Keplerian effect that has sometimes been used to help nail down neutron star masses is pericenter precession, which exists because in general relativity two point masses have such precession (in contrast to Newtonian gravity, where two point masses orbit in an ellipse that traces perfectly over itself). Suppose you have a neutron star in a binary with a main sequence star or a white dwarf instead of with another neutron star. Are there any non-GR contributions to pericenter precession?