Phys 194–FYRE PS 6

Given: Oct 11, 2017. Due: Oct 18 & 25, 2017

Homework Policy: You can consult class notes and books. Always try to solve the problems yourself; if you cannot make progress after some effort, you can discuss with your classmates or ask the instructor. However, you cannot copy other's work: what you turn in must be your own. Make sure you are clear about the process you use to solve the problems: partial credit will be awarded.

Problem 1 Radio Telescopes

Look up information on a radio telescope that is not GBT or Arecibo. Prepare a 5–10 min presentation (3–5 slides) on this telescope for class on Oct 18. This presentation should include a bit about what sort of science the telescope does, what its history is, and what makes it unique.

Let us know (astro-fyre-instruct@uwm.edu) if you need suggestions. Or look at https://en.wikipedia.org/wiki/Radio_telescope.

Problem 2 Timing Papers

Note: this problem is due in 2 weeks (Oct 25)

Either starting at the ADS library of NANOGrav papers (http://adsabs.harvard.edu/cgi-bin/nph-abs_connect?library&libname=NANOGrav&libid=55b946da9a) or elsewhere, find a pulsar timing paper. Prepare a 5–10 min presentation (3–5 slides) on this paper. This presentation should include something about the sample of pulsars that were timed (could be a single pulsar), what the goals were, what the investigators found, which telescope(s) they used, ...

When you have your paper picked out, please check with us astro-fyre-instruct@uwm.edu) to make sure it's appropriate. And let us know if you need help understanding the paper.