

SUGGESTED TOPICS FOR TERM PAPERS

1. Theory of white dwarf cooling and comparison with observations.
2. Pulsation theory of variable stars.
3. Theory of classical novae.
4. Fundamentals of radiative transfer.
5. Ambipolar diffusion in star formation. **Difficult.**
6. Theory of magnetars. **Difficult.**
7. Physics of the Helium Flash.
8. Type Ia supernovae.
9. The Hulse-Taylor binary pulsar. *Nobel Prize winner.*
10. Theory of spiral arms in galaxies. **Difficult.**
11. Theory of Saturn's rings.
12. Theory of shock waves and application to astrophysics. **Difficult.**
13. Theory of jets from active galactic nuclei. **Difficult.**
14. Observational evidence for black holes. *Nobel Prize winner.*
15. Observations of jets from active galactic nuclei.
16. Observations of the Hubble expansion.
17. Observations and interpretation of the cosmic microwave background. *Nobel Prize winner.*