Astronomy 401

Stars

Homework # 7, Due Thursday, November 15, 2001

Name: ____________________

Student number: ____________________

1. *Scientific American*, September 2001, page 18, has a brief description of results from the Sudbury Neutrino Observatory and Super-Kamiokande neutrino experiments. Summarize, **in your own words**, the key results that show that the solar neutrino observations now agree with the predictions of the solar models.
2. Carroll & Ostlie, Figure 11.3 shows that the abundance of ${}^{3}_{2}$He has a maximum at r = 0.29 $R_{\odot}$ rather than at the center of the Sun. Explain why this occurs.
3. Carroll & Ostlie: problem 11.2 (a)
4. Carroll & Ostlie: problem 11.8
5. Convection Project
   Perform the second of the Convection projects – 2. Average structure.
6. If you have not yet done so, complete the first of the Convection projects – 1. Trial run, for half credit rather than zero credit.