Assignment 5 — due Monday November 16th $[Revision : 1.1]$

This assignment comprises questions **10.1**, **10.3**, **10.4**, **10.5**, **10.17**, **10.18** and **10.20** from Chapter 10 of O&C, plus the following *EZ-Web* calculation task:

Assume that the structure of the present-day Sun is described by a polytrope. Using an appropriate *EZ-Web* model, estimate the polytropic index n appearing in the polytropic equation of state $P(\rho) = K\rho^{(n+1)/n}$. Be sure to show how you arrived at your answer, including any graphs that you plotted.