

ASTR 792
T/R 9:30 - 10:45 AM
Due December 5

Week #16

Draine 27.1a

Consider an HII region consisting only of hydrogen. Suppose that the source of ionizing photons is a blackbody with temperature $T = 32000$ K. Assume the nebula is in thermal and ionization equilibrium.

- (a) Near the center of the nebula, at what temperature will heating by photoionization balance cooling?