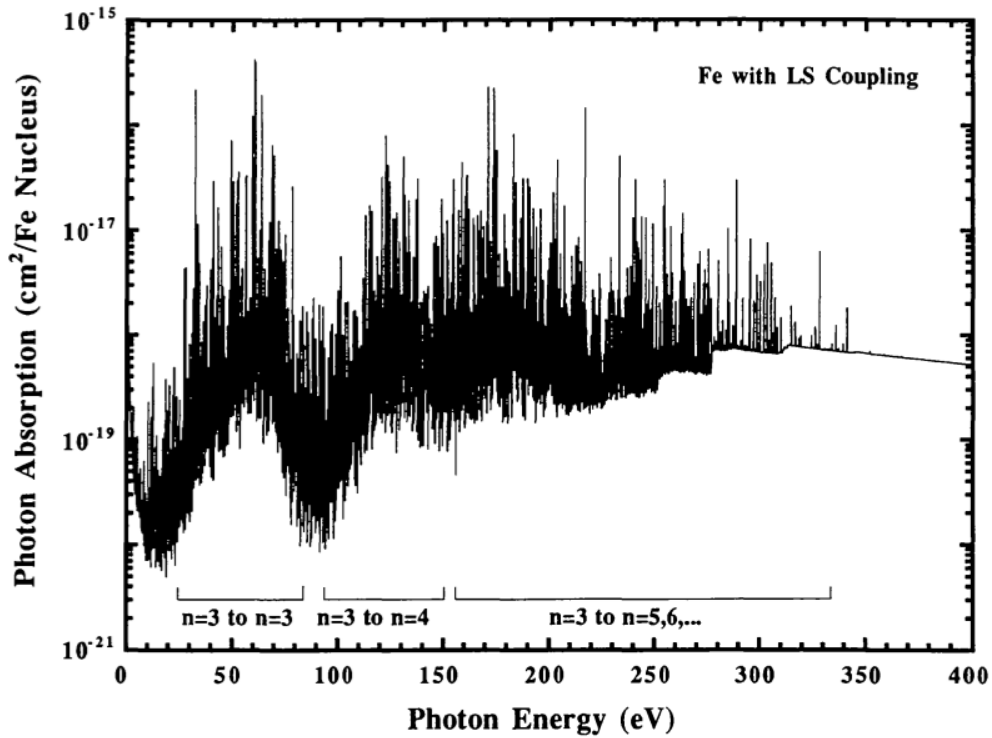
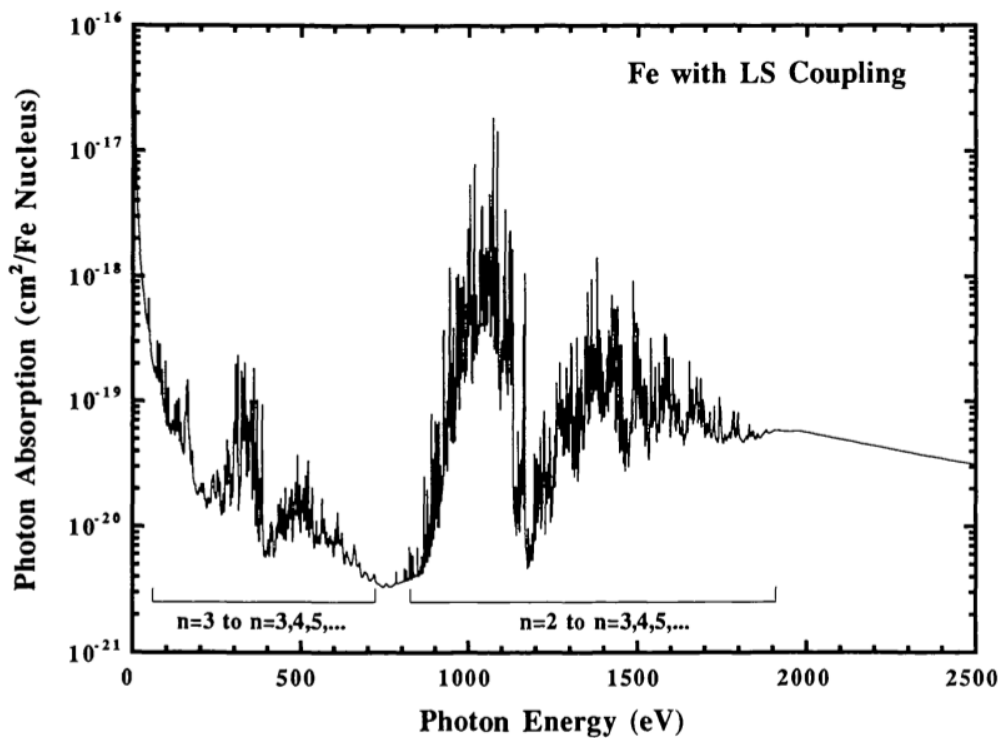


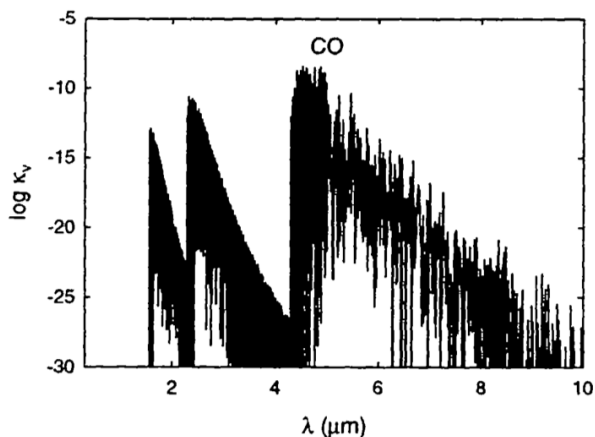
some simple examples of atomic  $\kappa_{\nu}$   
 OPAL: Rogers & Iglesias (1992):  $\log T=5.4$ ,  $\log \rho=-5.3$



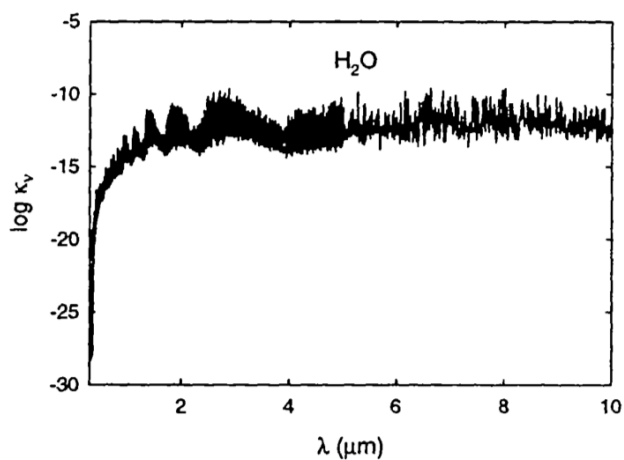
some simple examples of atomic  $\kappa_{\nu}$   
 OPAL: Rogers & Iglesias (1992):  $\log T=6.5$ ,  $\log \rho=-1.5$



# molecular absorption

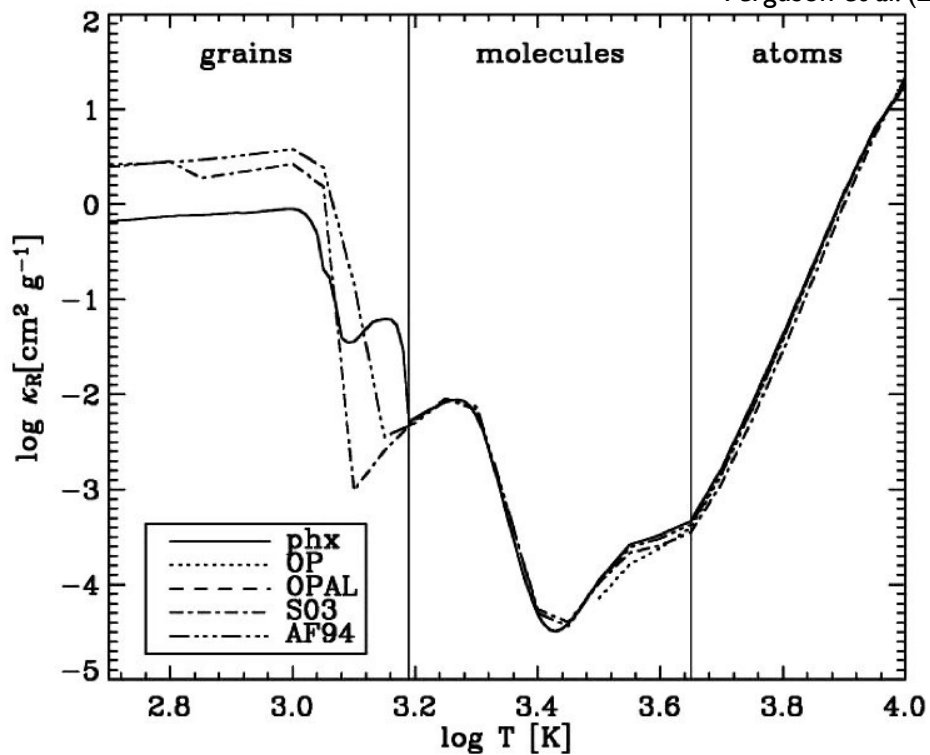


Ferguson et al. (2005)

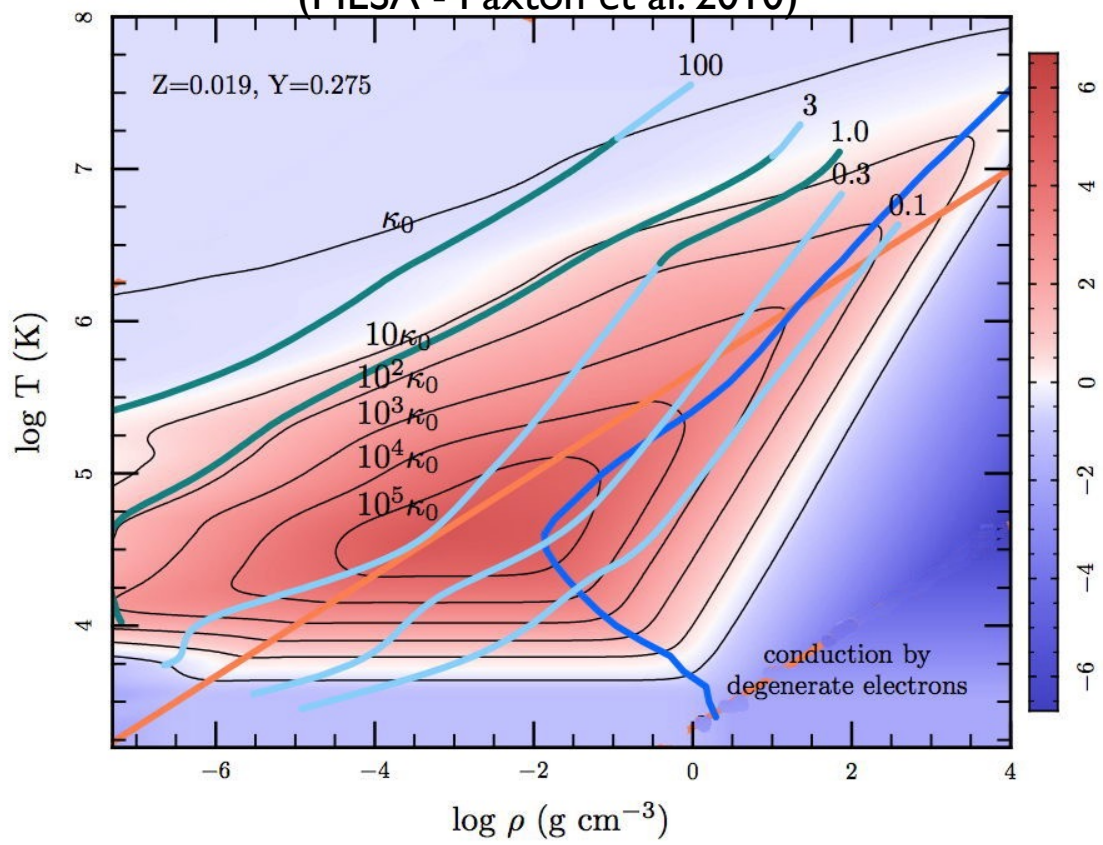


# low-temperature opacities

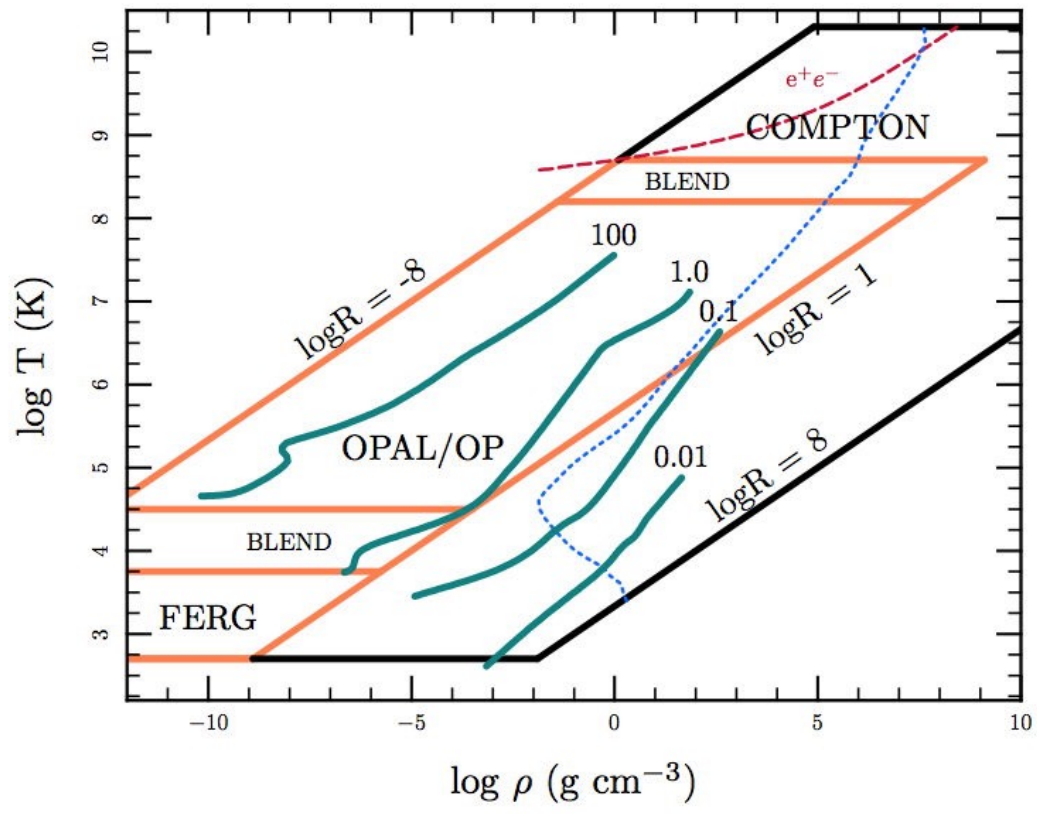
Ferguson et al. (2005)



# opacity sources in models (MESA - Paxton et al. 2010)



# opacity sources in models (MESA - Paxton et al. 2010)



# opacity sources in models

(MESA - Paxton et al. 2010)

