



Figure 5.2: The Brunt-Väisälä frequency as a function of the radial coordinate  $\ln(r/p)$  for several models with the same mass, temperature, helium layer mass, and central oxygen mass fraction but different internal chemical profiles (a) from the center of the model at left to the surface at right, and (b) only in the range of  $\ln(r/p)$  indicated by the dashed box in the upper panel. The three curves correspond to a profile with  $q$  equal to 0.2 (dotted), 0.49 (solid), and 0.8 (dashed).