$\mathsf{M} = 0.8 \; \mathsf{M}_{\odot} \qquad \mathsf{X} = 0.70 \qquad \mathsf{Z} = 0.03 \qquad \gamma = 1.67$ ×10<sup>29</sup> (a) mass (b) mass density <u>×1</u>0<sup>4</sup> 15 10 8 ho [kg/m $^3$ ] 6 5 2 0 0 0.2 0.6 0.2 0.6 0.8 0.4 8.0 0 0.4 0  $r/R_s$  [-]  $r/R_s$  [-] 2 ×10 16 15 ×10<sup>6</sup> (c) pressure (d) temperature 1.5 10 **⊢**[⊼ 5 0.5 0 0 0.2 0.4 0.6 8.0 0 0.2 0.4 0.6 0.8 0  $r/R_s$  [-]  $r/R_s$  [-] 2.5 × 10<sup>26</sup> (e) luminosity (f) opacity 1 2  $\log \kappa \, [\mathrm{m}^2/\mathrm{kg}]$ 0.5 -0.5 0.5 0 0.2 0.4 0.6 8.0 0.2 0.4 0.6 0.8 1 0 1 0 r / R<sub>s</sub> [-]  $r/R_s$  [-]