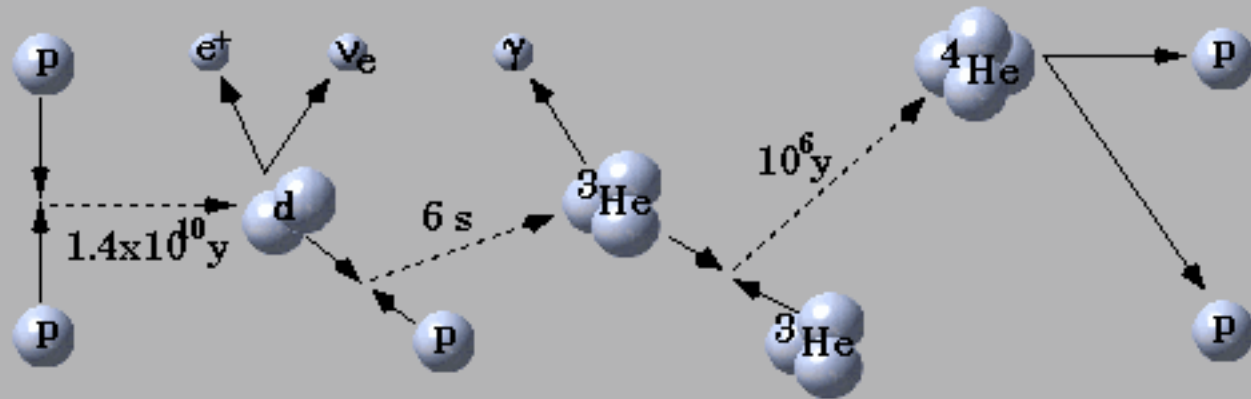




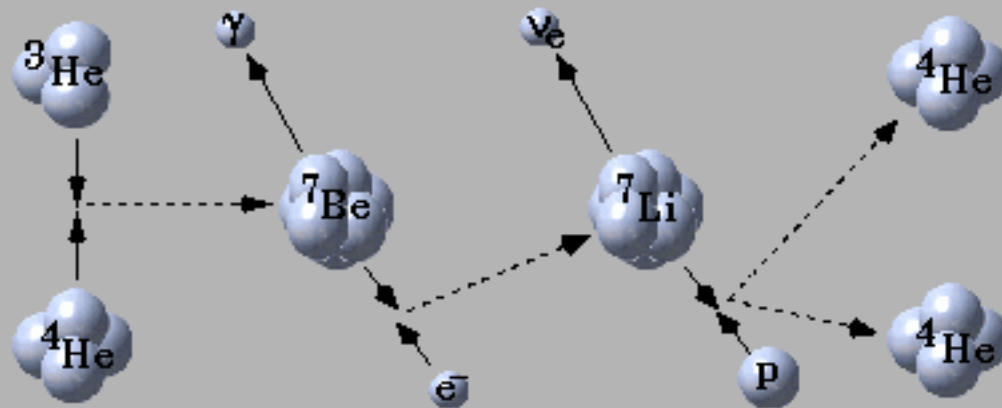
Structure and Evolution of Stars

Lecture 8

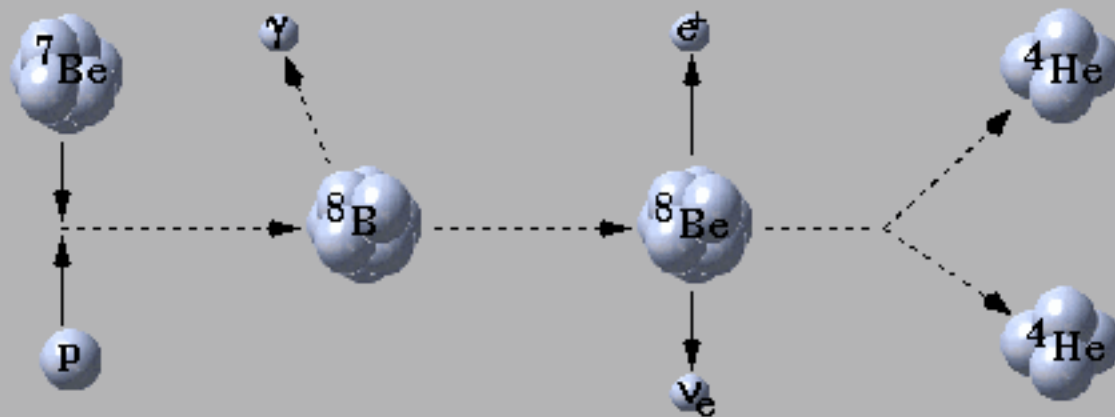
PPI



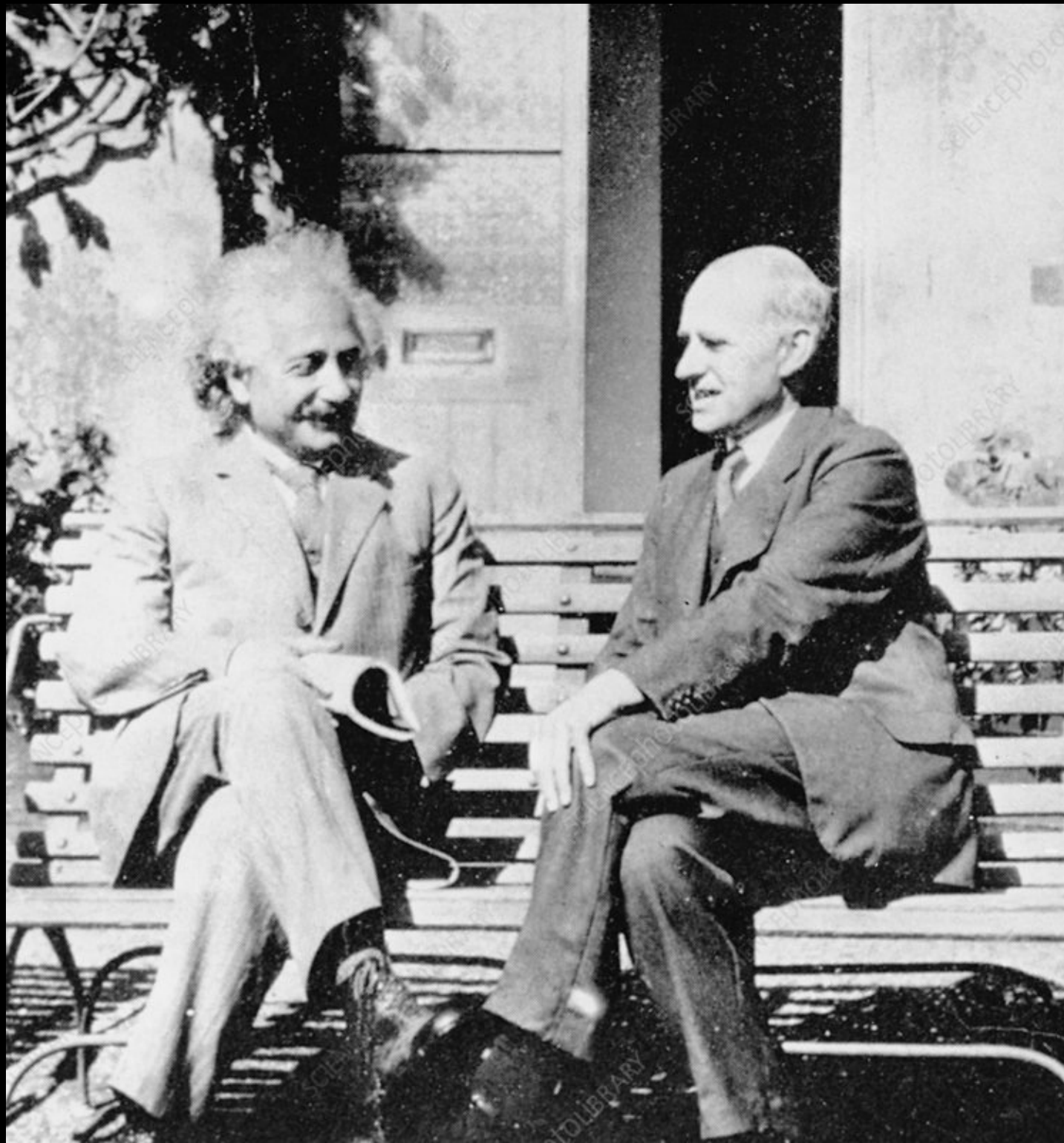
PPII



PPIII



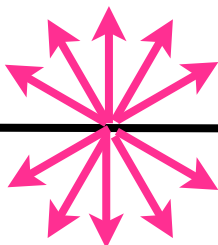




1 cm



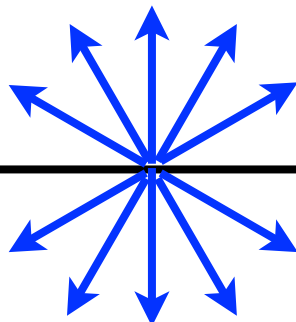
T_1



$T_1 < T_2$



T_2

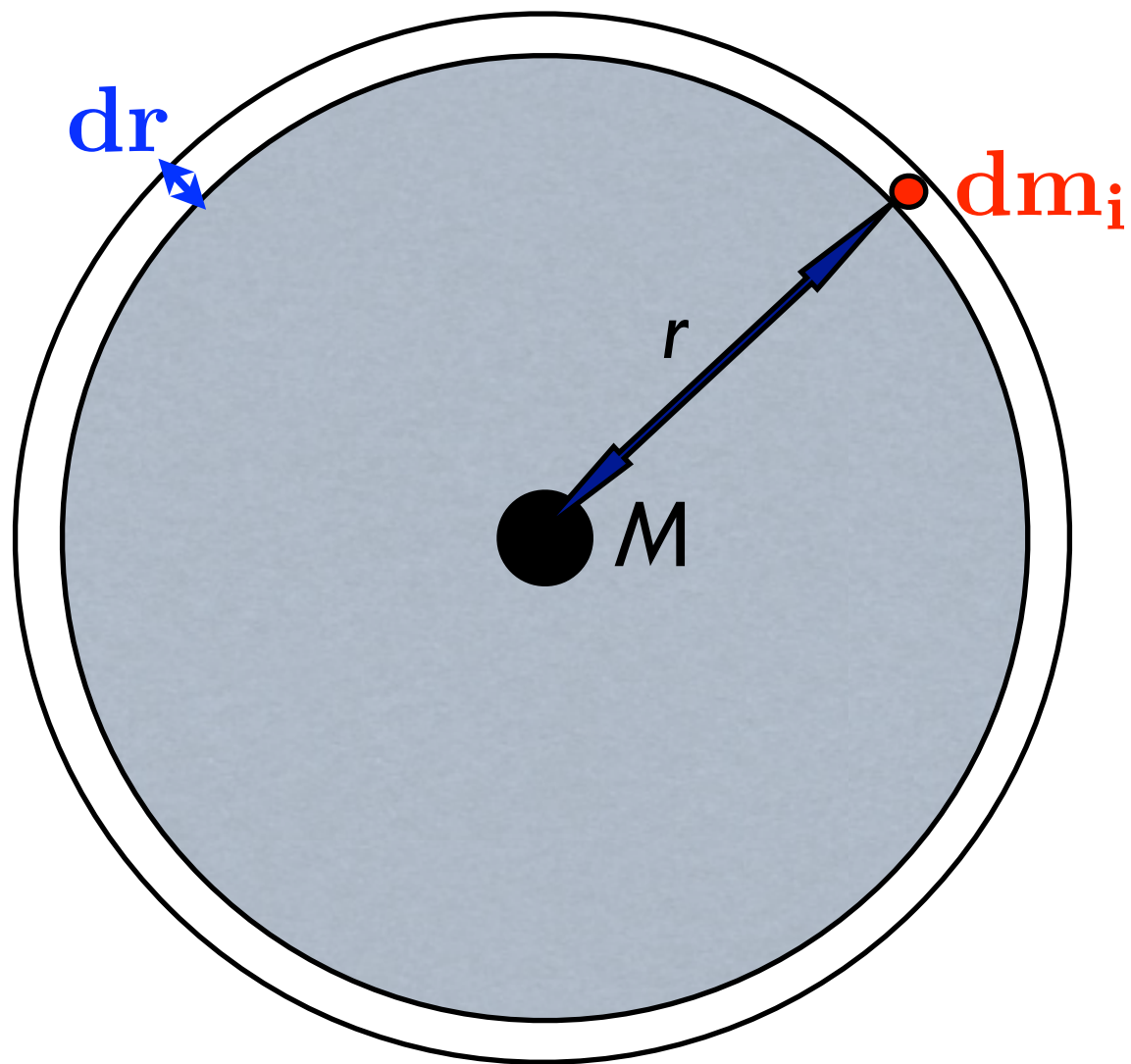


To the surface

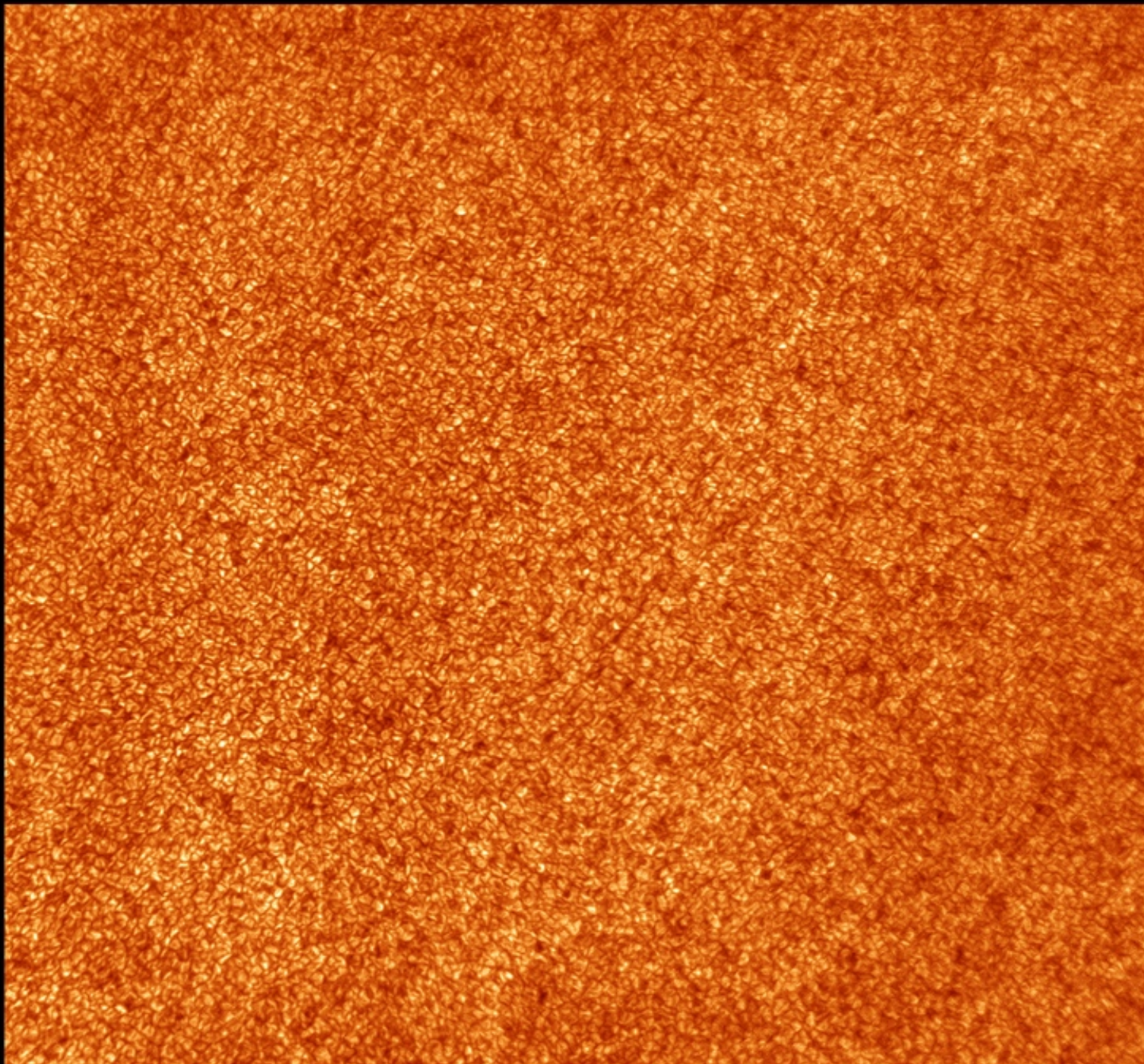


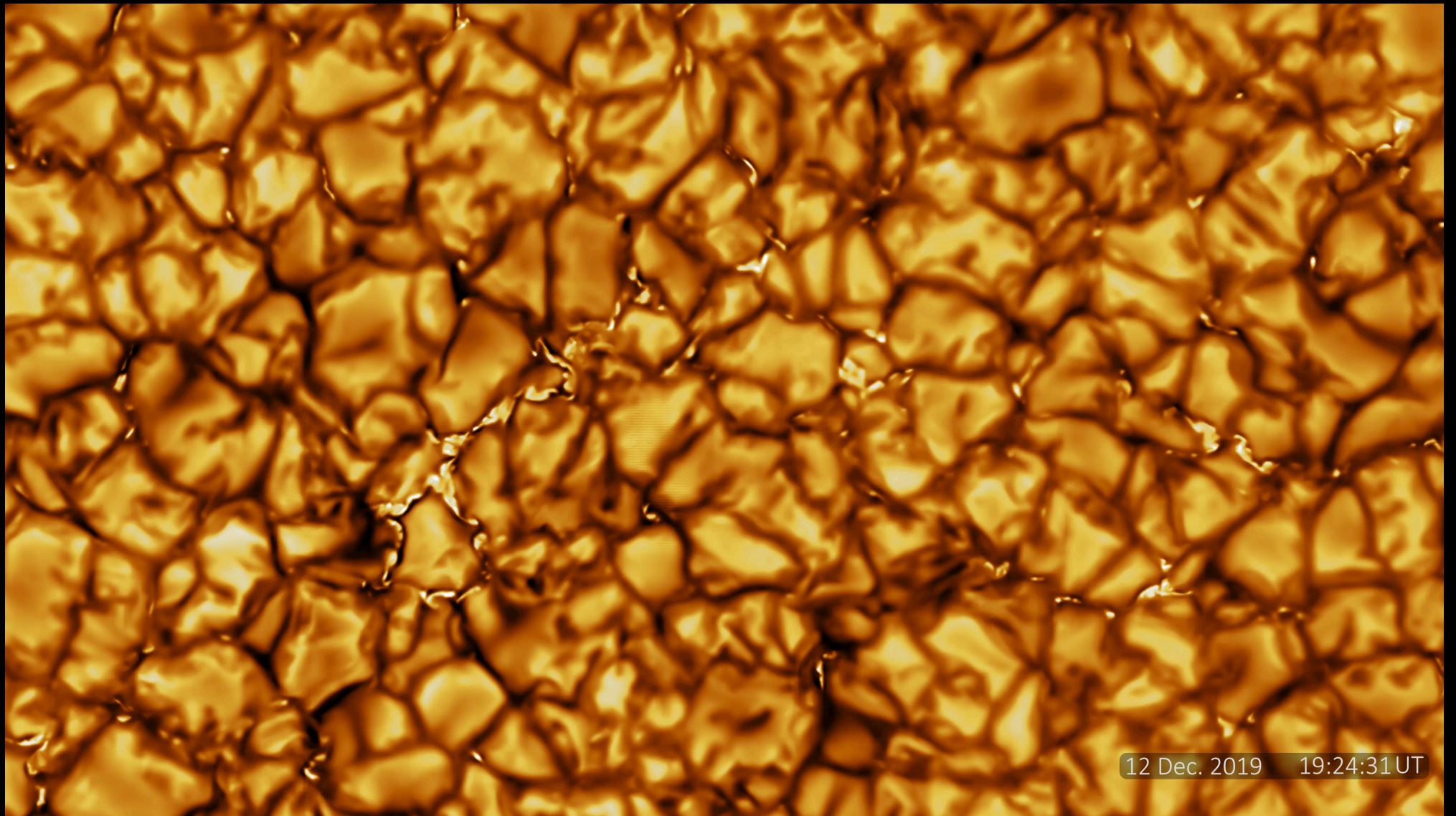
To the core



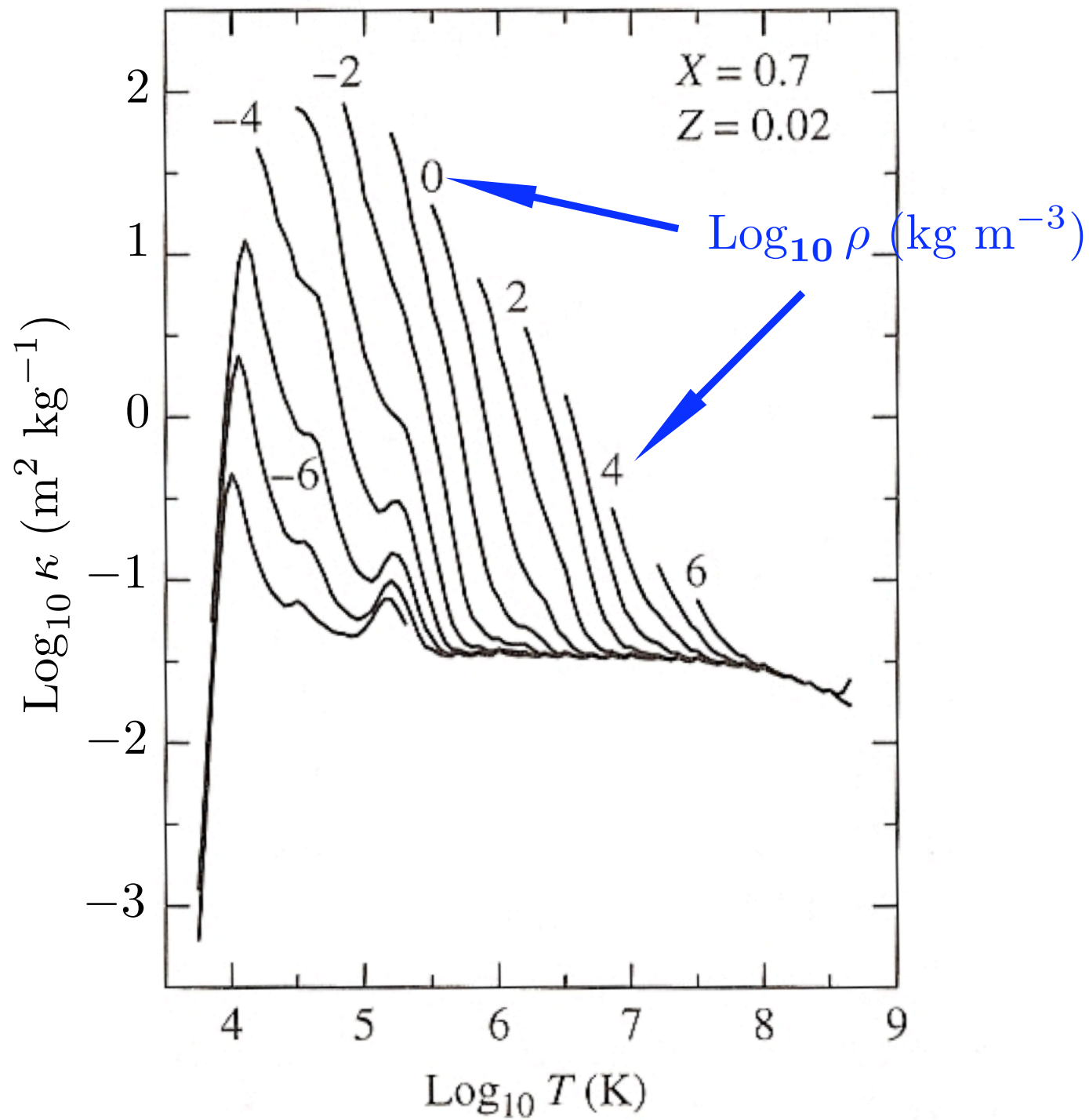


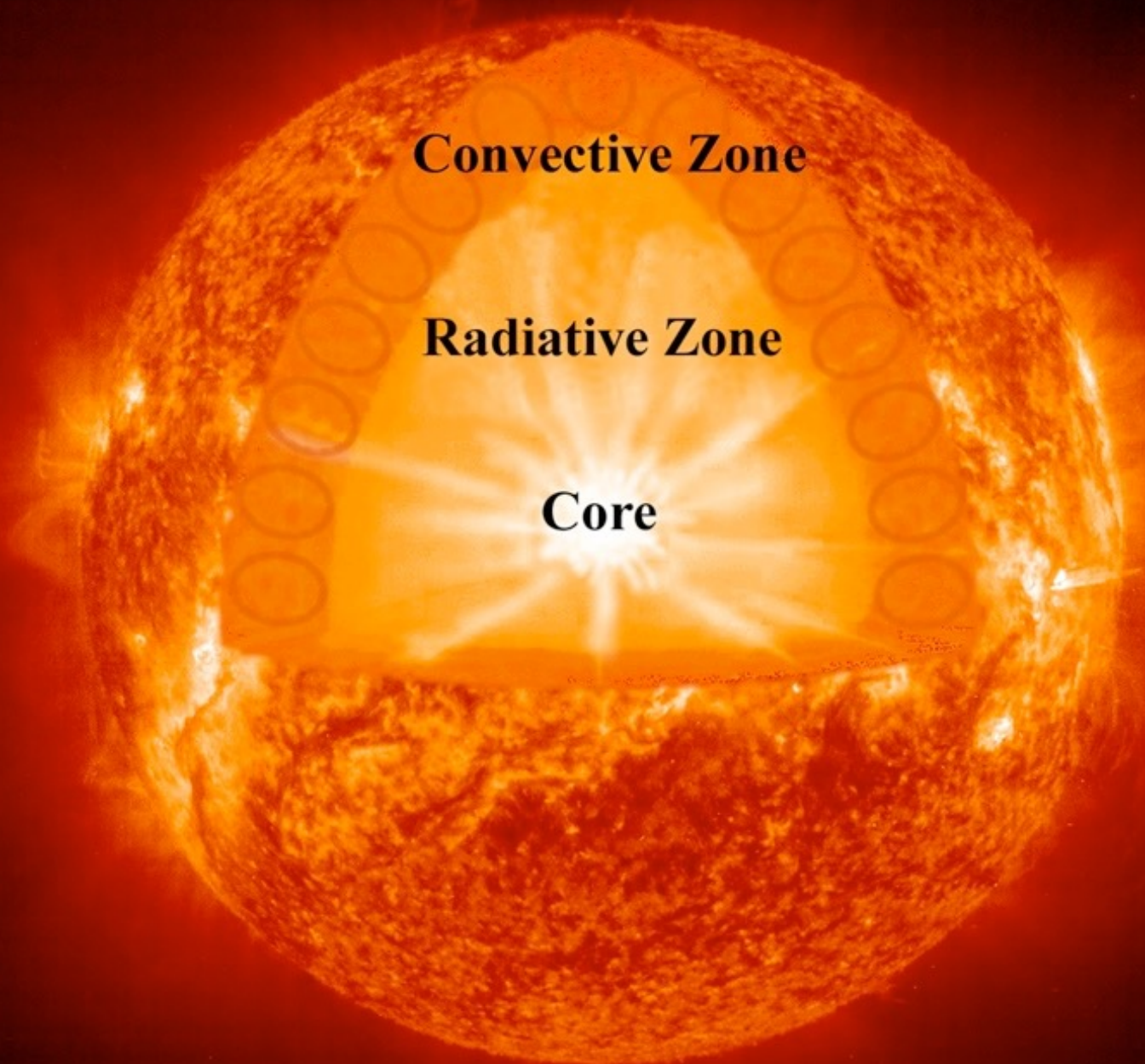






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Convective Zone

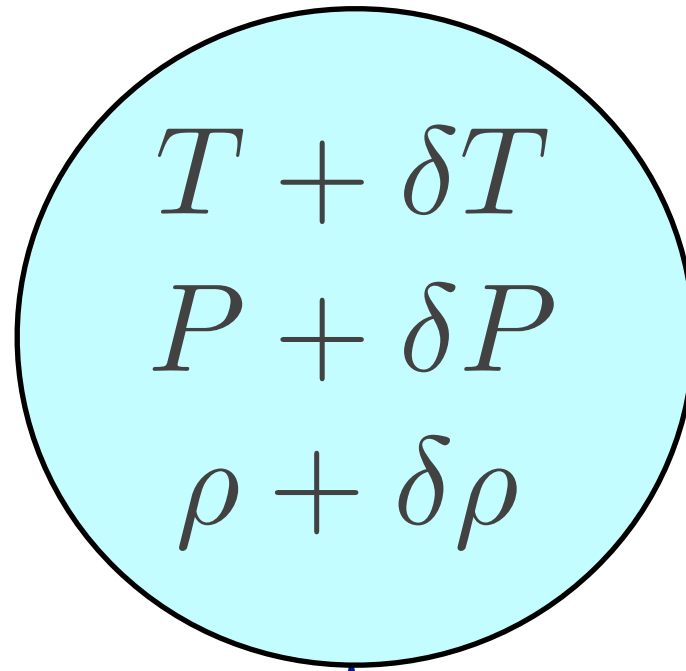
Radiative Zone

Core

$$T + dT$$

$$P + dP$$

$$\rho + d\rho$$

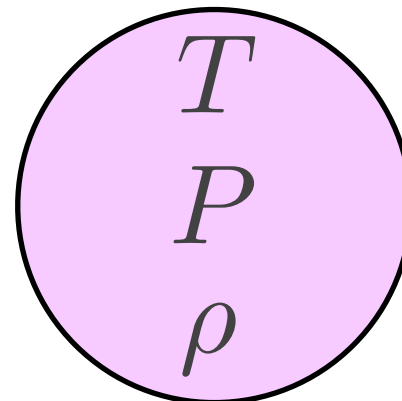


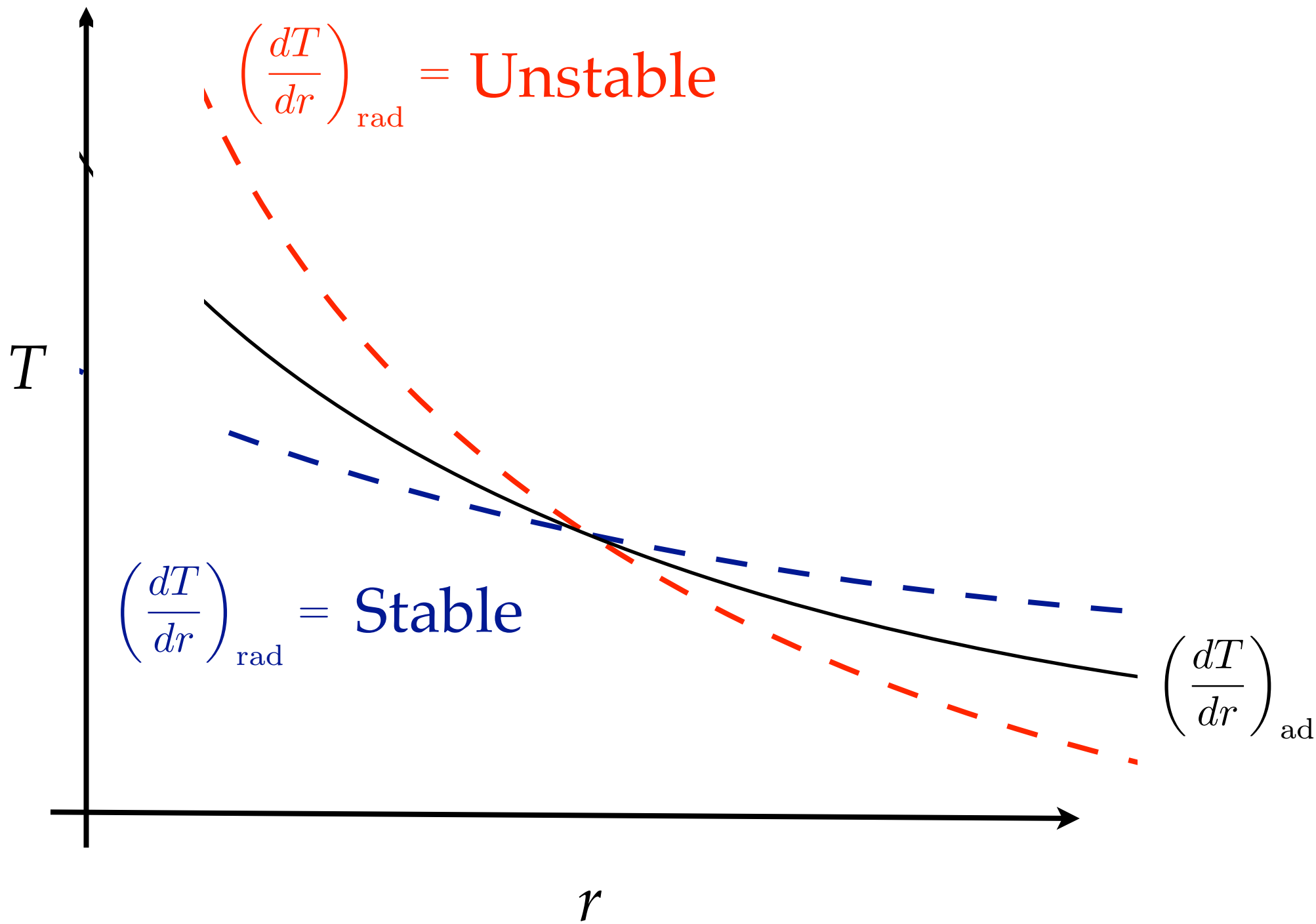
dr

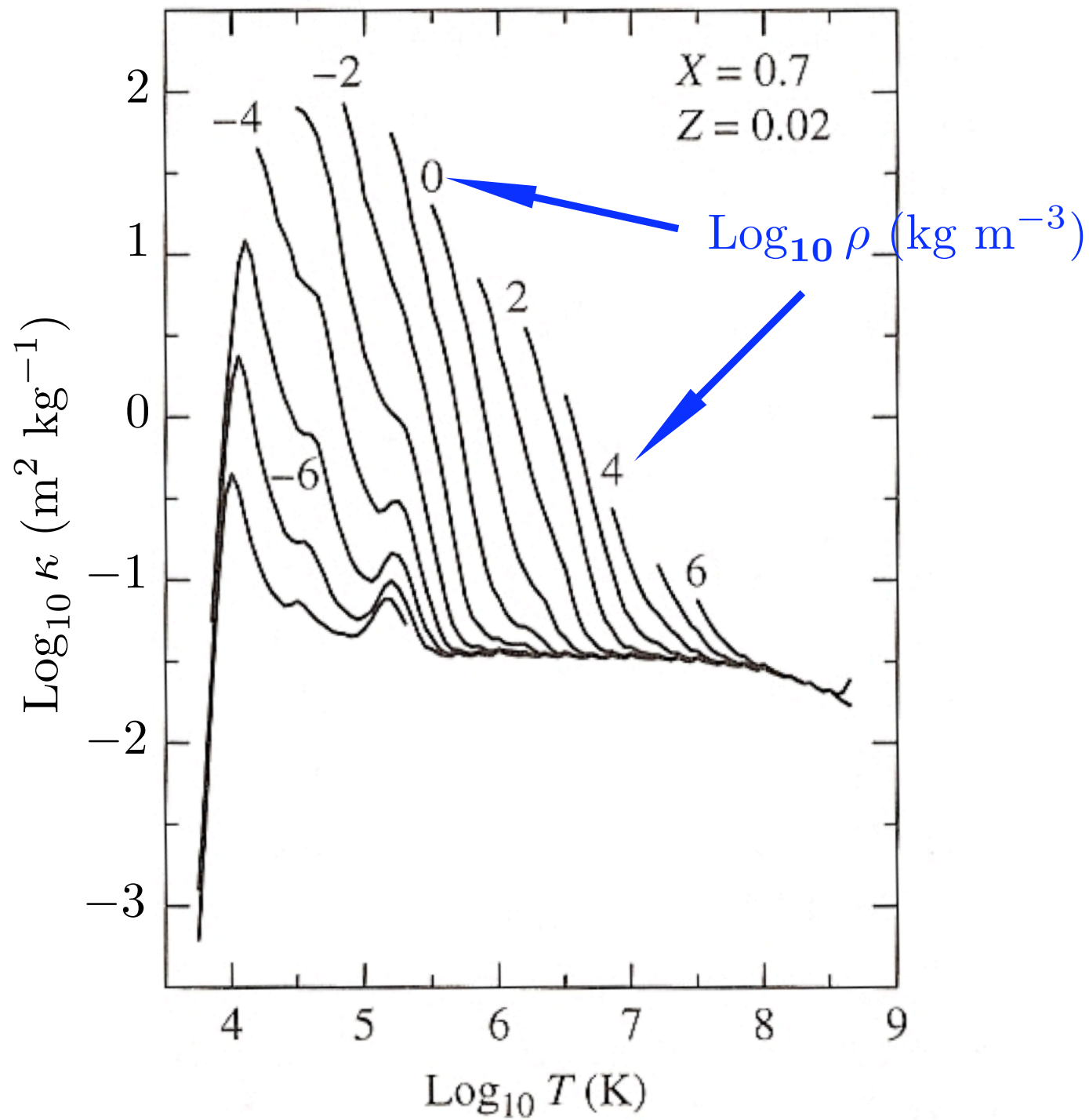
$$T$$

$$P$$

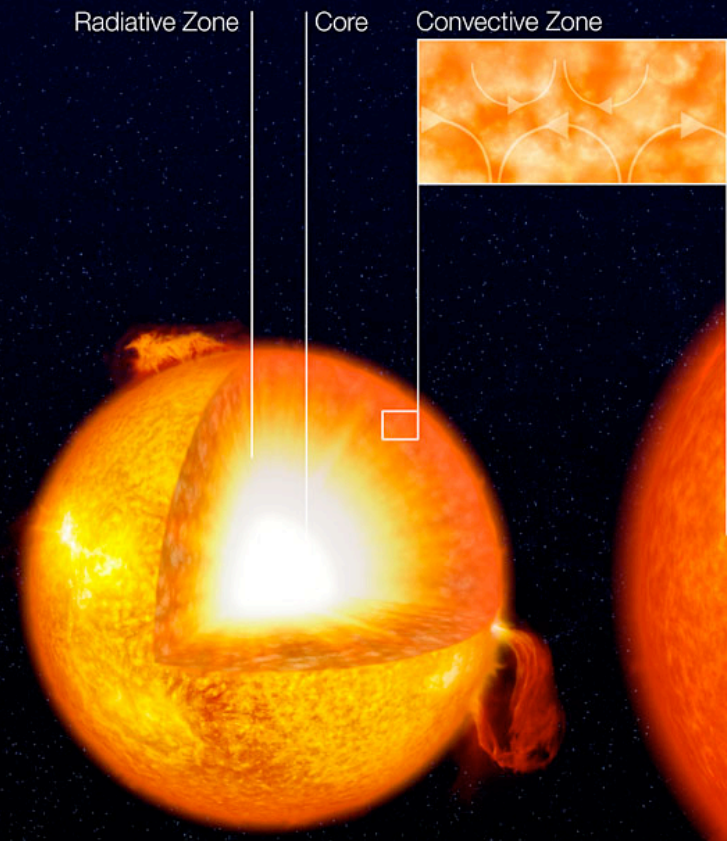
$$\rho$$



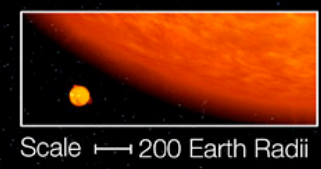
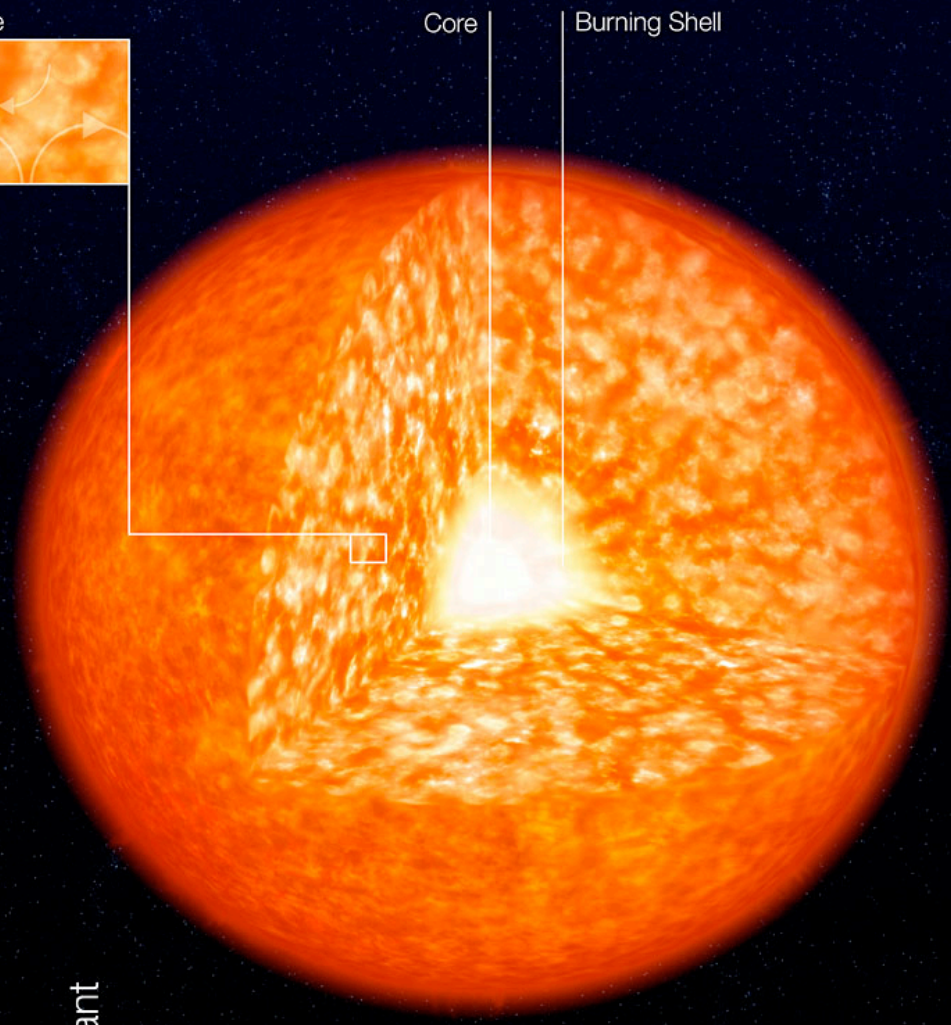


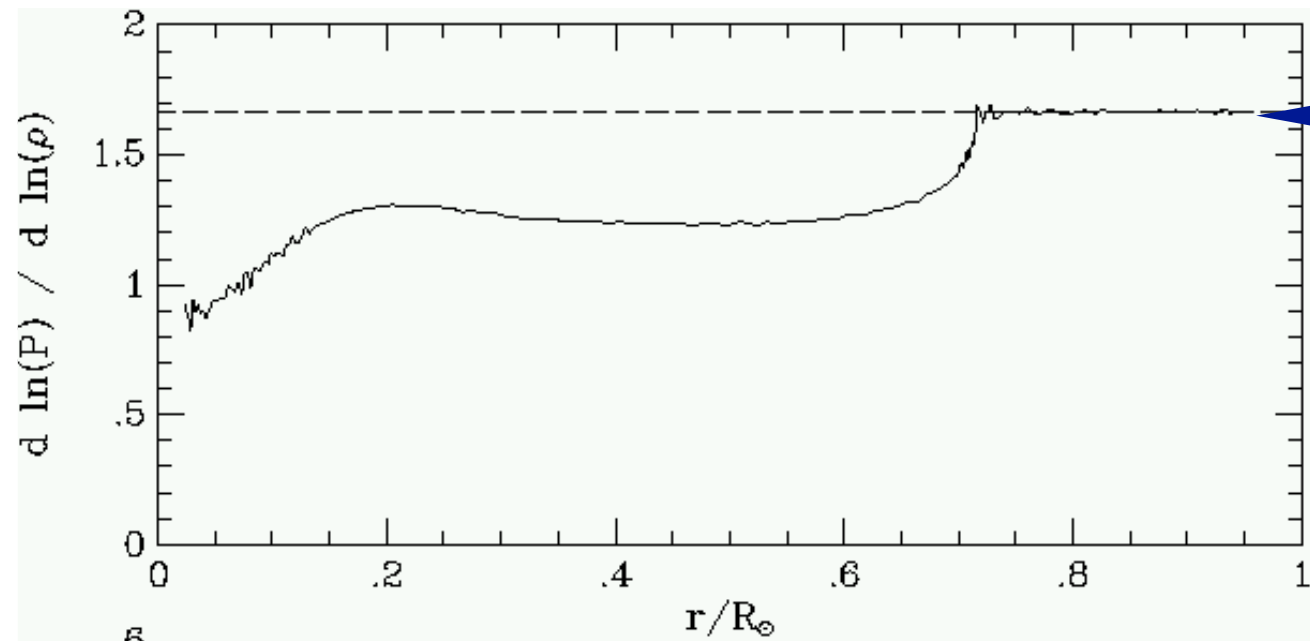


Solar Type

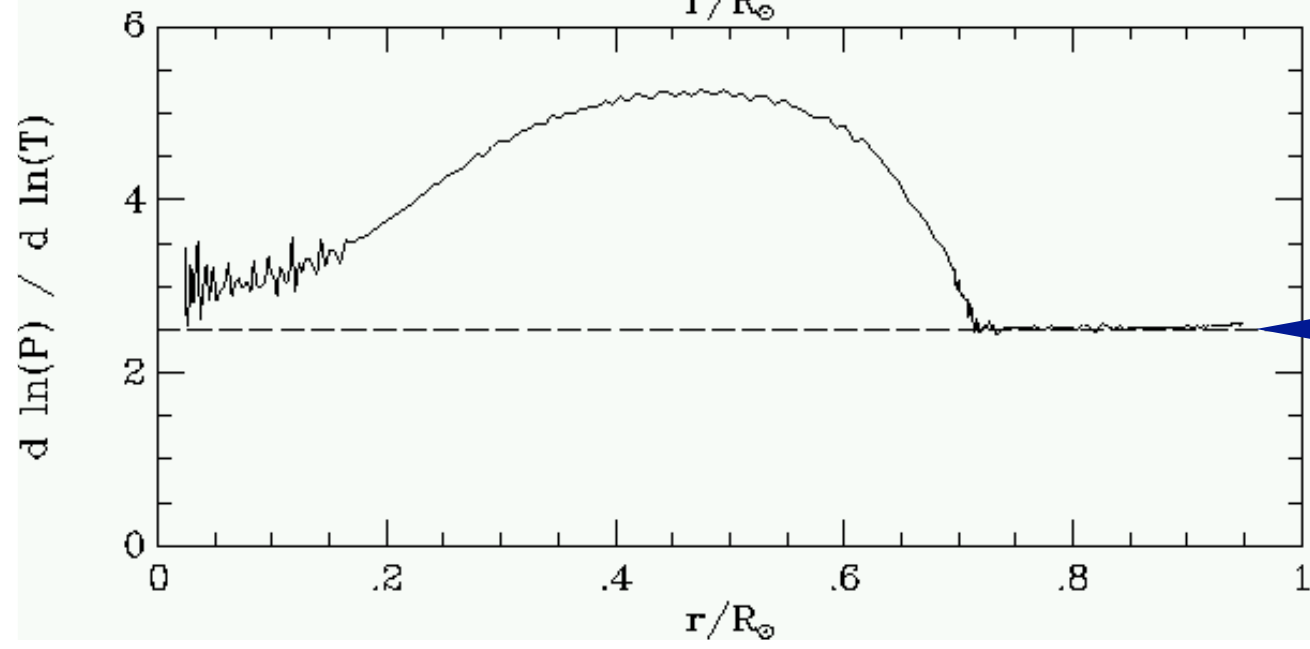


Red Giant

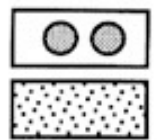




$$\gamma = \frac{5}{3}$$



$$\frac{\gamma}{\gamma - 1} = \frac{5}{2}$$

 Convective transport
Radiative transport

