

Lecture 21: Announcements

Exam results on egradebook (good job)

à Distribution: 55% =A, 17%= B, 14% =C, 6%=D 7%=Fail/No show

à Extra credit of 4 points, for class participation

Overall mid-semester grade is on egradebook.

à Distribution: 35% =A, 34%= B, 15% =C, 4%=D 11%=Fail/No show

Class format for second half of the semester

- 1) On Mondays : homeworks + review of topics
- 2) Reading assignment each week. Multiple choice quiz on it. This week
Ch 16, Properties of Stars (Cosmic Perspectives, 3rd Ed)
10-15 min quiz this Friday at start of class

In-class notes today

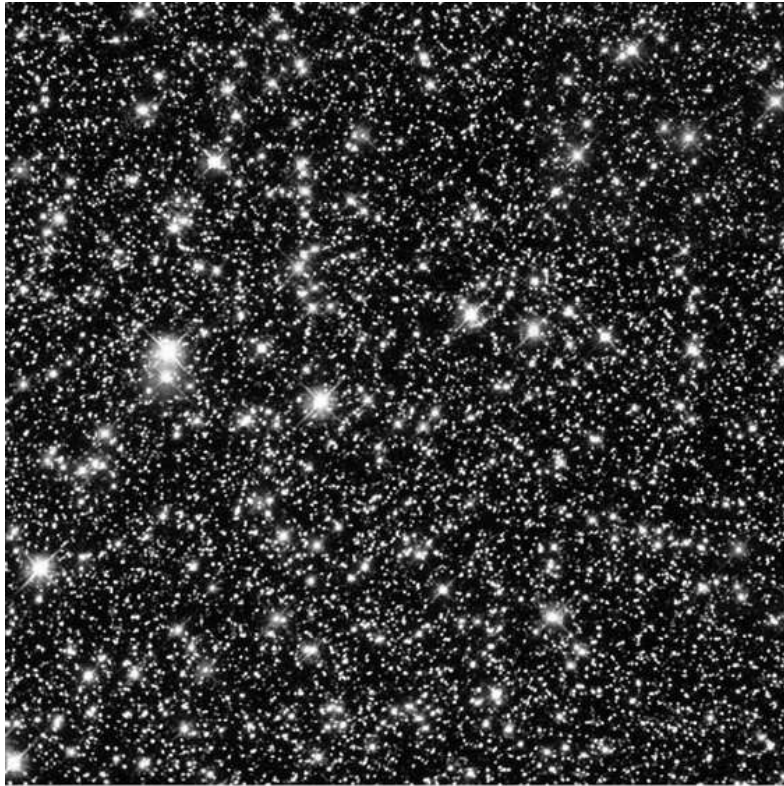
Discussion of exam1 questions

Properties and Evolution of Stars

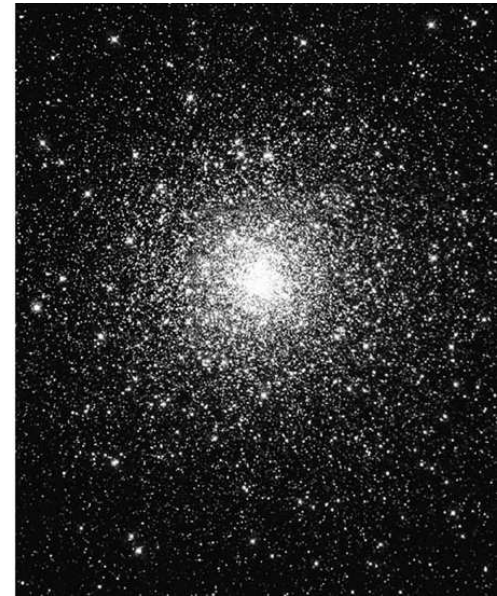
Topics to be covered in class

- Why do stars look different in the sky?
- Properties of stars: Luminosity, Flux, Temperature, Radius, Color
- The Hertzsprung Russell (H-R) diagram....a surprise for astronomers!
How does a star's luminosity depend on its radius and temperature?
Different stars on H-R diagram : Main sequence, Giants, Supergiants, White Dwarfs
- Mass : the most fundamental property of a star
How mass determines the lifetime, evolution, destiny, and (L,R,T) of a star!
- Evolutionary track of a star on the H-R diagram
Age-dating the Universe with an H-R diagram !
- How do we measure distance, luminosity, temperature, mass, radius of stars?

Appearance of Stars



Center of M Way (HST)

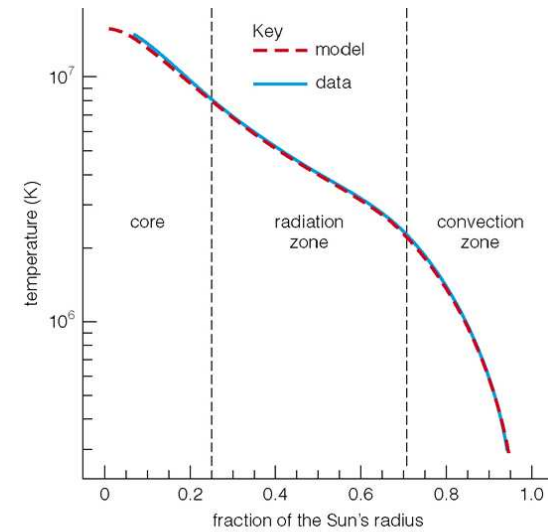
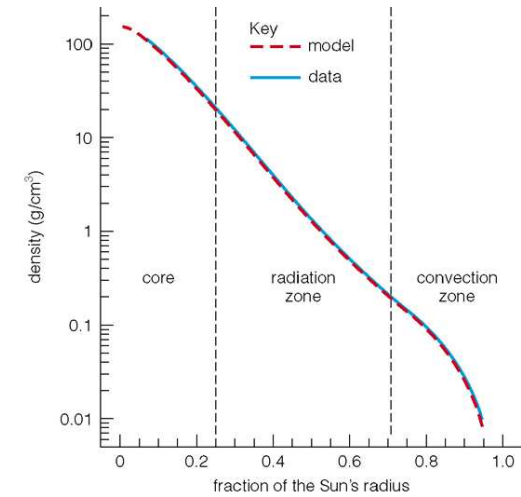
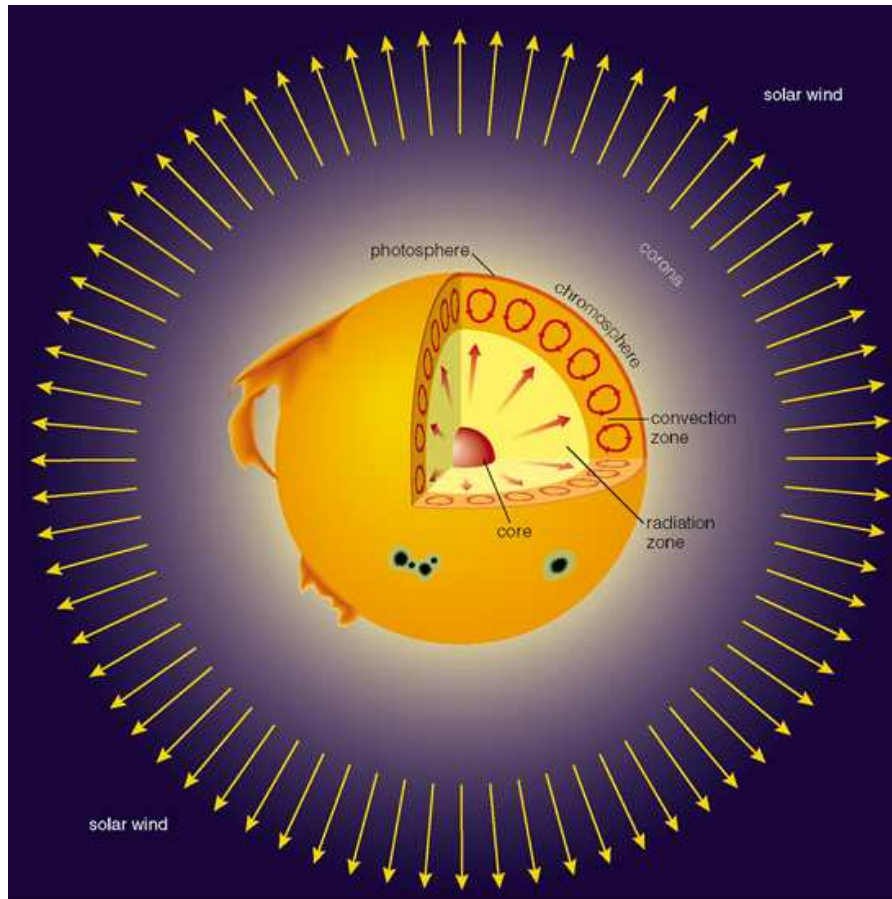


M80 globular cluster (HST)



Pleiades

Temperature and Radius of a Star



Temperature and radius of a star refer to these quantities as measured at the photosphere layer.