

The Hertzsprung-Russell Diagram

1

In spite of their distance, we can measure many properties of stars just by studying their light:

- temperature
- luminosity
- composition
- radial velocity
- mass
- diameter

2

Trying to make sense of these measurements, Ejnar Hertzsprung (1873-1967) and Henry Norris Russell (1877-1957) both used *scatter plots* of luminosity against spectral class (temperature)



(a)



(b)

3

The Hertzsprung-Russell (HR) diagram is a wonderful tool for displaying the properties of stars, and helps us make sense of how these properties change over time

