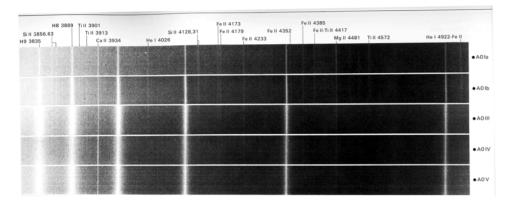
## The HR Diagram and Cosmic Distances

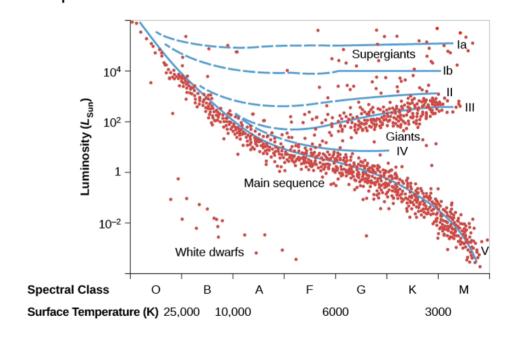
In addition to classifying stellar spectra by line strength, we can classify by line width



The luminosity class (a Roman numeral, possibly with a lower-case letter) is appended to the spectral class to indicate line width:

- la is narrowest
- V is broadest

The luminosity class allows us to figure out where on the Hertzsprung-Russell (HR) diagram a star should be placed



Once we've placed a star on the HR diagram, we can read off its luminosity, and from that figure out its distance