

3.13 Spectral Line Widths

PRE-LECTURE READING 3.13

- *Astronomy Today*, 8th Edition (Chaisson & McMillan)
- *Astronomy Today*, 7th Edition (Chaisson & McMillan)
- *Astronomy Today*, 6th Edition (Chaisson & McMillan)

VIDEO LECTURE

- Spectral Line Widths¹ (5:20)

SUPPLEMENTARY NOTES

Spectral Line Broadening

- Observed absorption and emission line widths can be Doppler broadened by:
 - Thermal motions
 - Rotational motion
 - Turbulent motions
- Other mechanisms can also broaden, and sometimes even split, absorption and emission lines. We will learn more about these in Astronomy 102.

ASSIGNMENT 3

- Do Question 10.

¹<http://youtu.be/V-hiT43.YGo>