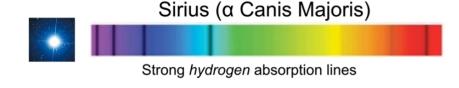
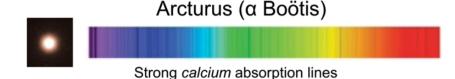
The Spectra of Stars

The <u>absorption spectra</u> of stars show great variety





Early <u>spectral classification</u>: assign a letter based on strength of hydrogen absorption lines (A=strongest, O=weakest):

- Sirius: strong H lines → A type
- Arcturus: weak H lines → K type

Annie Jump Canon (1863-1941): differences in absorption line strengths are not due to differences in composition, but rather to differences in temperature



Canon re-organized the A-O sequence into temperature order, eliminating some letters. This led to the modern (Harvard) system of spectral classes: O, B, A, F, G, K, M

