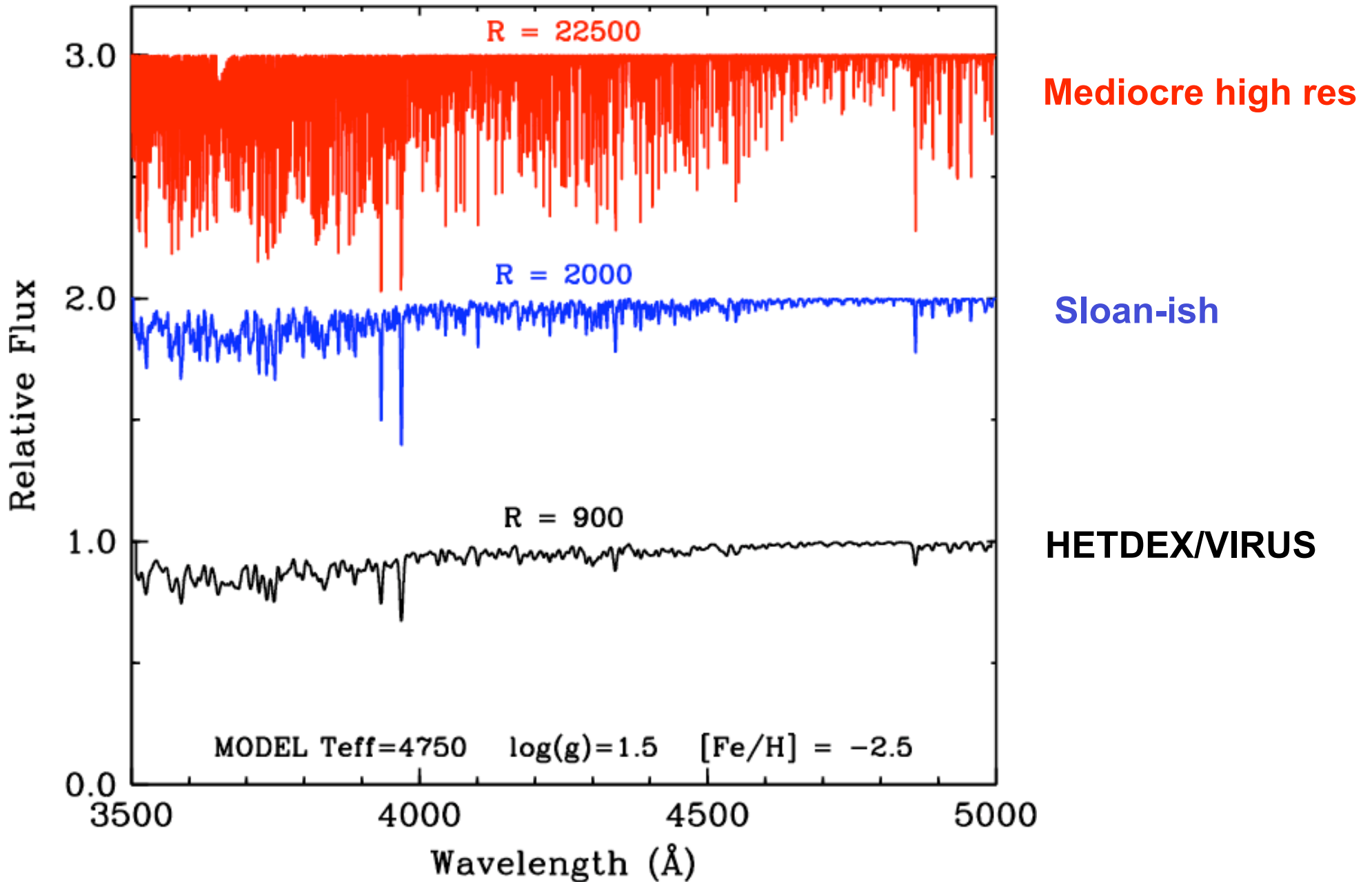


**HETDEX and
the lowest metallicity stars:**

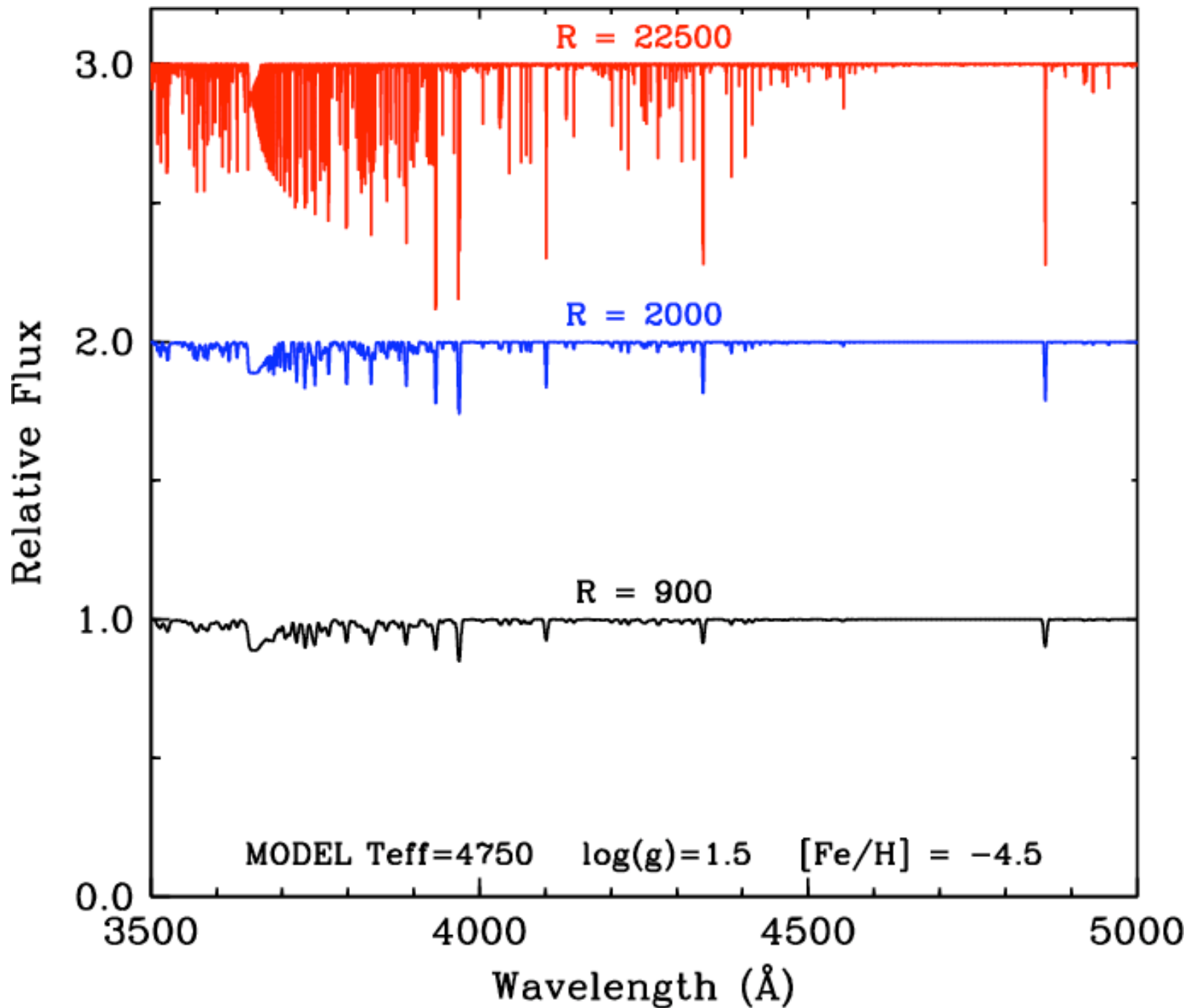
WHAT WILL YOU SEE?

Chris Sneden, UT Austin

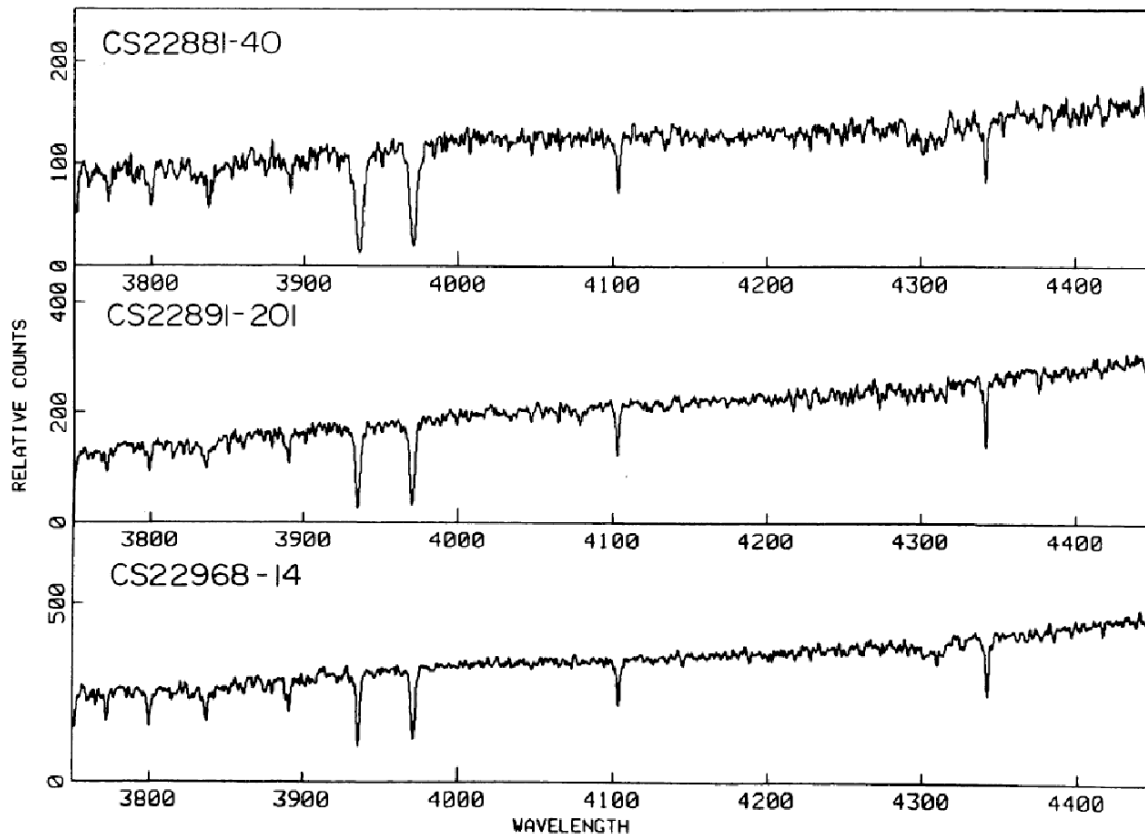
Ordinary metal-poor giant - simulation



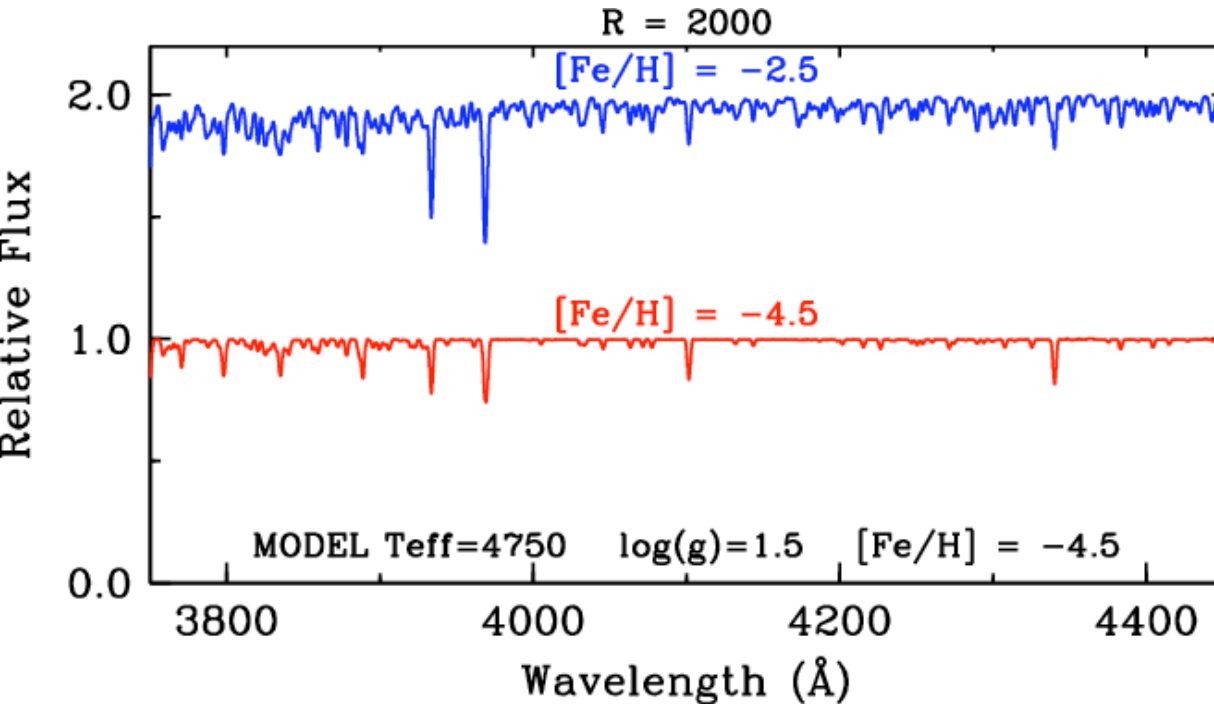
Extremely metal-poor giant - simulation



Beers et al. 1985



R ~ 2000
observations
and models



HK Survey discovery spectra

Beers, Preston, & Shectman 1985, AJ, 90, 2089

Bandpass: 3875-4025Å $R = \lambda/\Delta\lambda \sim 900$

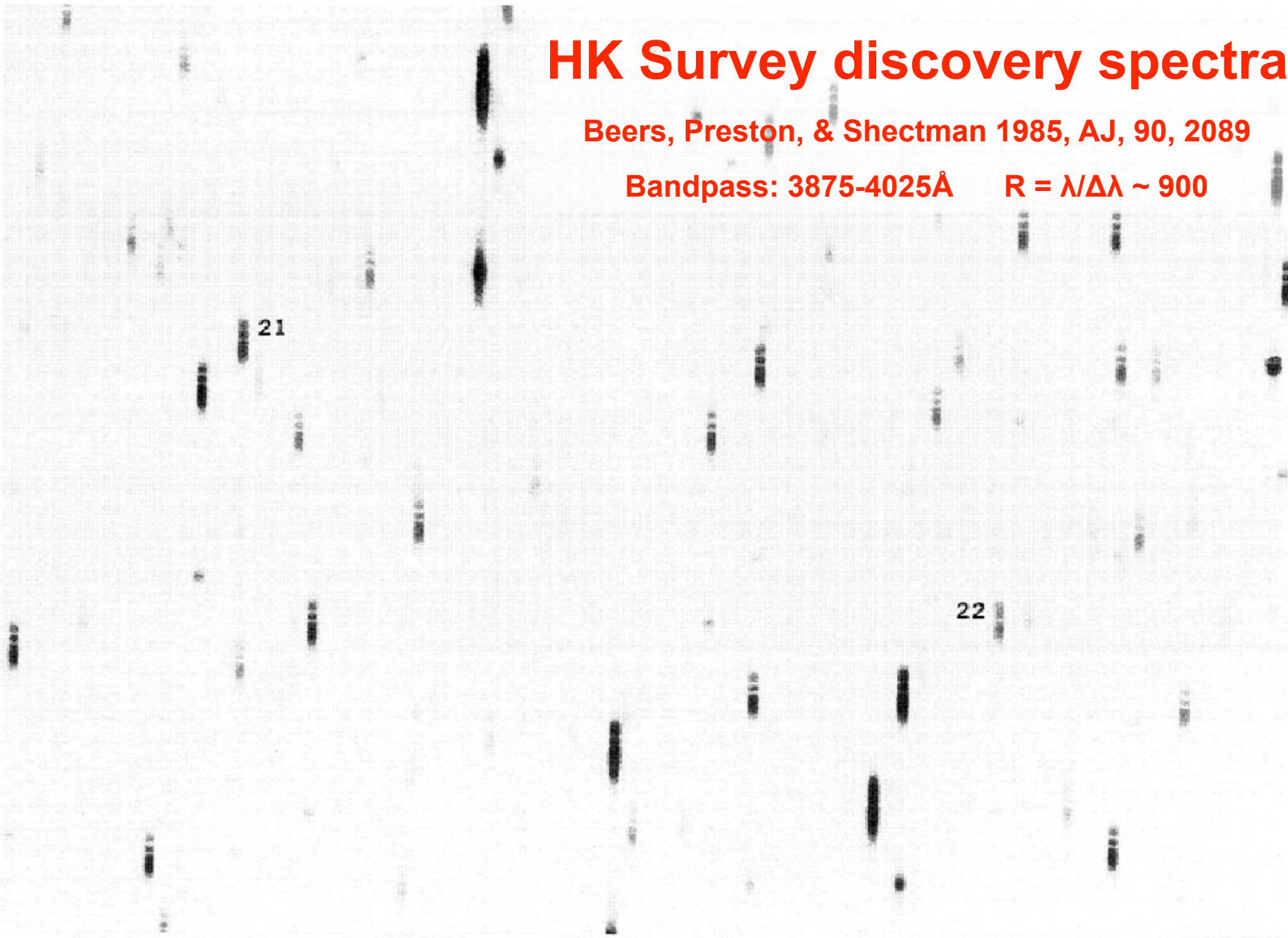
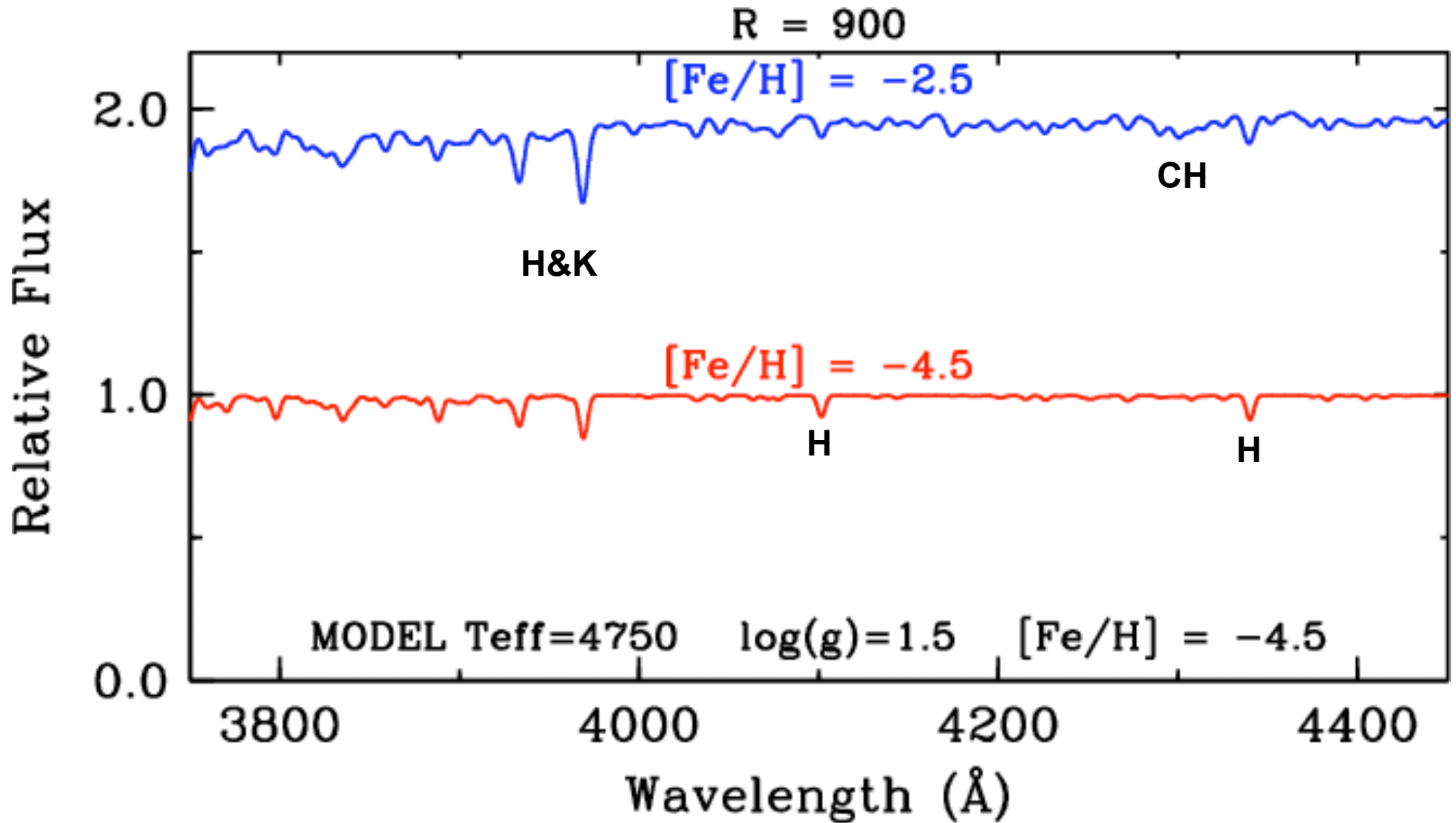
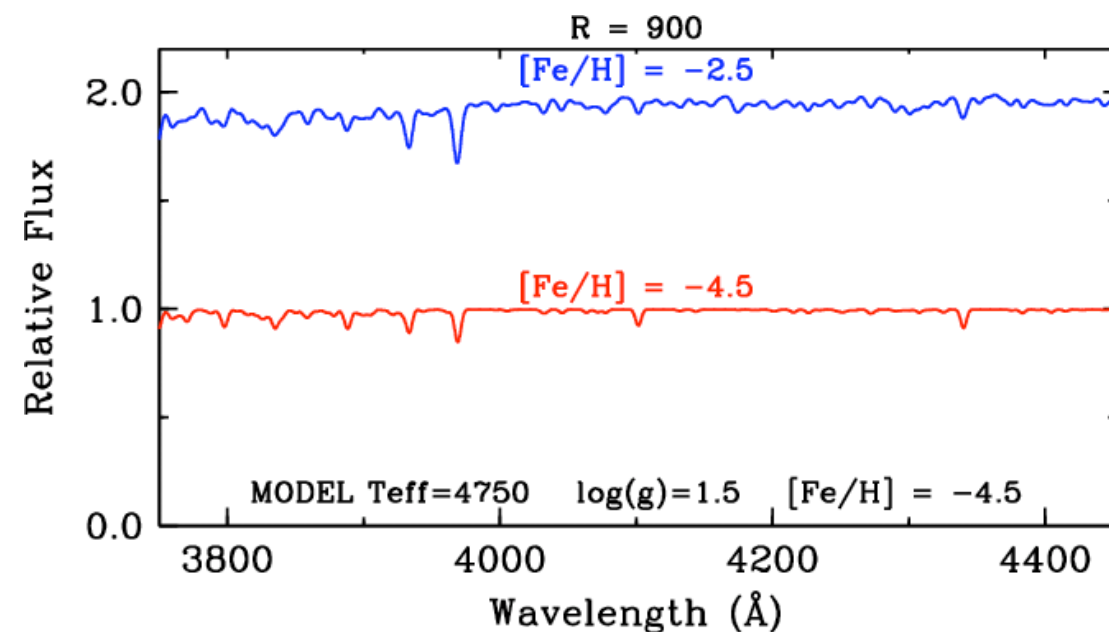


FIG. 2. An enlargement of the survey plate CS 22882. The spectrum of CS 22882-21, a typical low-metal star, and that of CS 22882-22, a halo AB star, are marked.

This is what we will see



Better than the original HK survey by far



- **Fainter by several mags**
 - **Flux information**
 - **Higher S/N**
 - **Balmer line information**
 - **C-rich low metallicity**
- “easy” detection**

Who needs Sloan?