

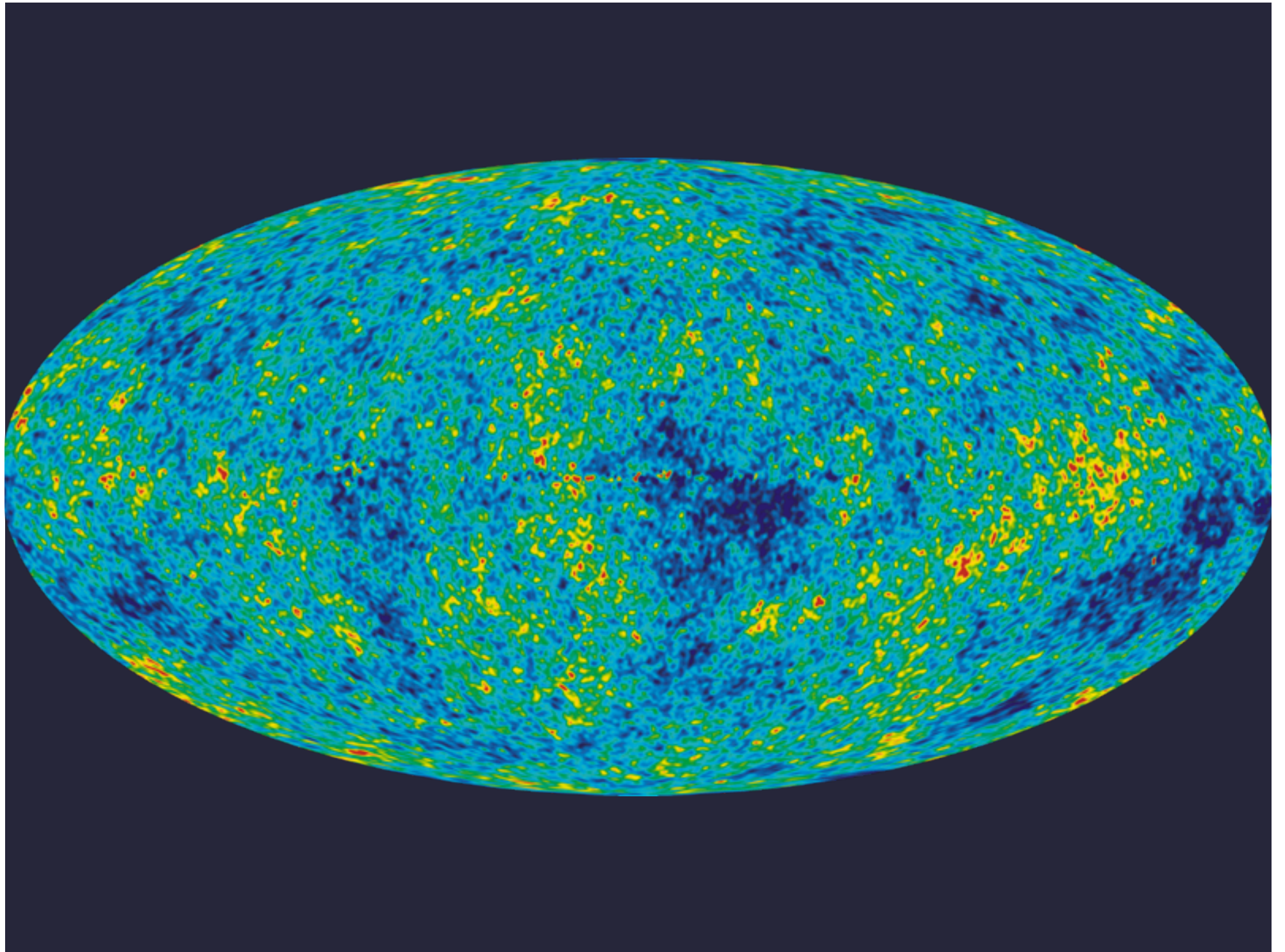
KICing ASS and taking Spectra

Andrew W. Mann



You are a better
astronomer than you
think you are.







WARNING



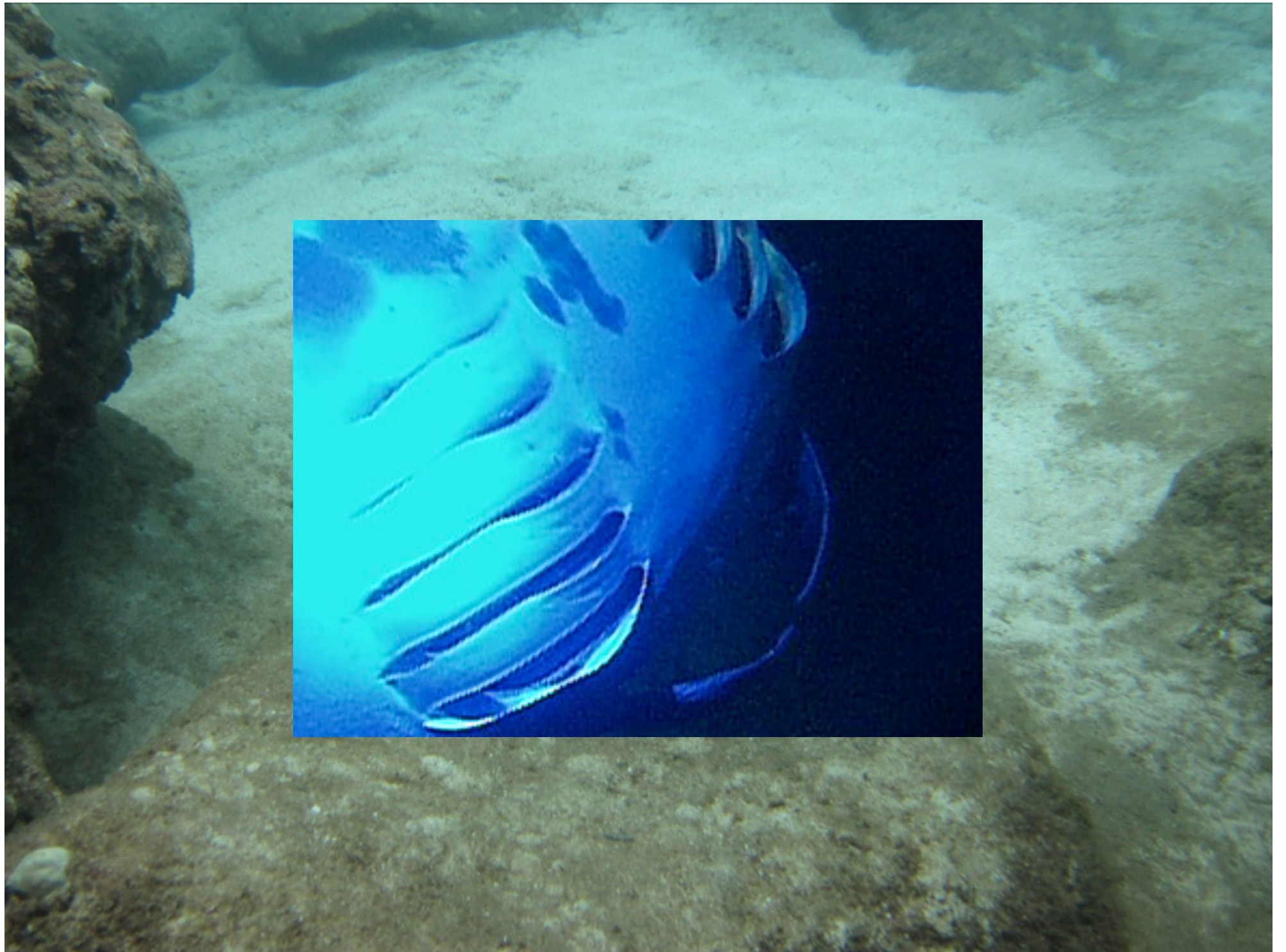
DO NOT TOUCH
Telescopes could cause
INJURY

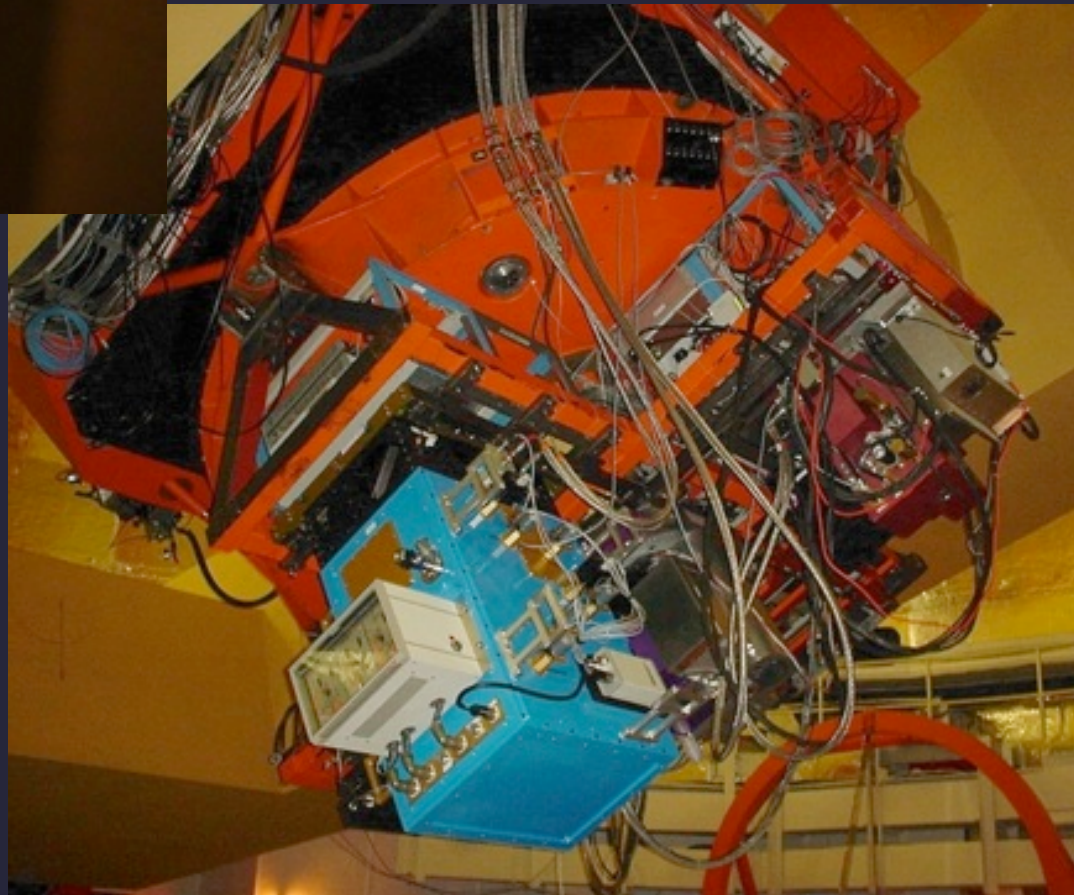
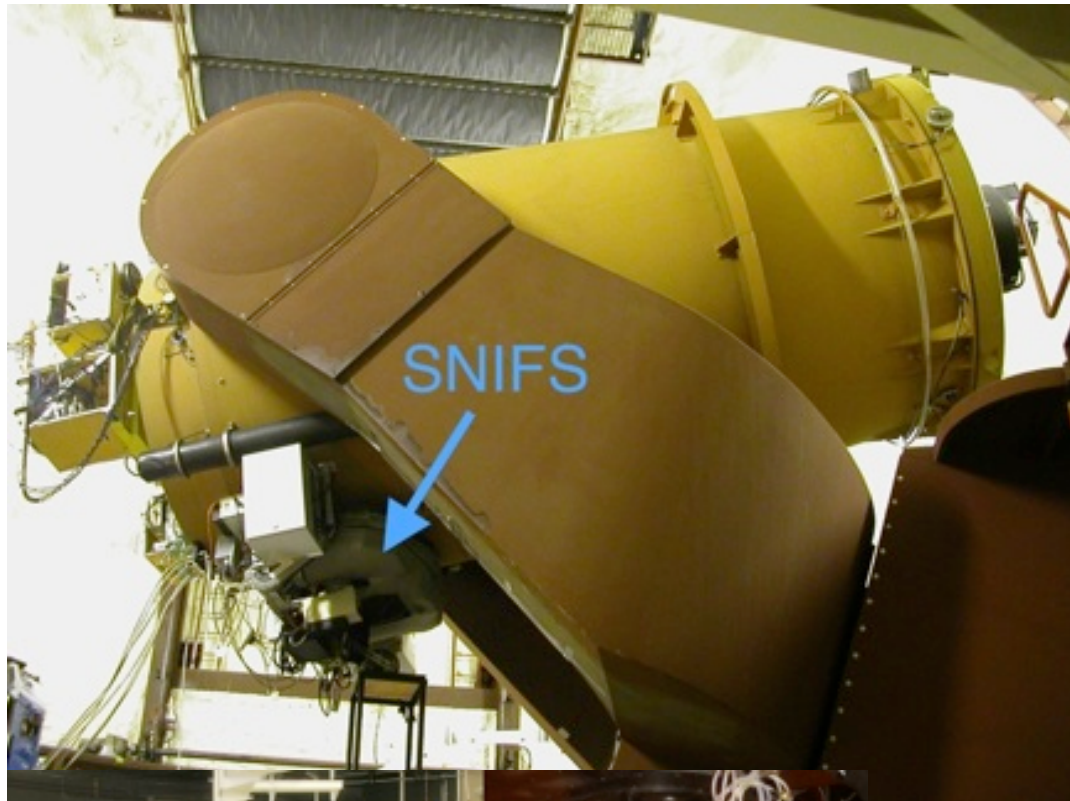


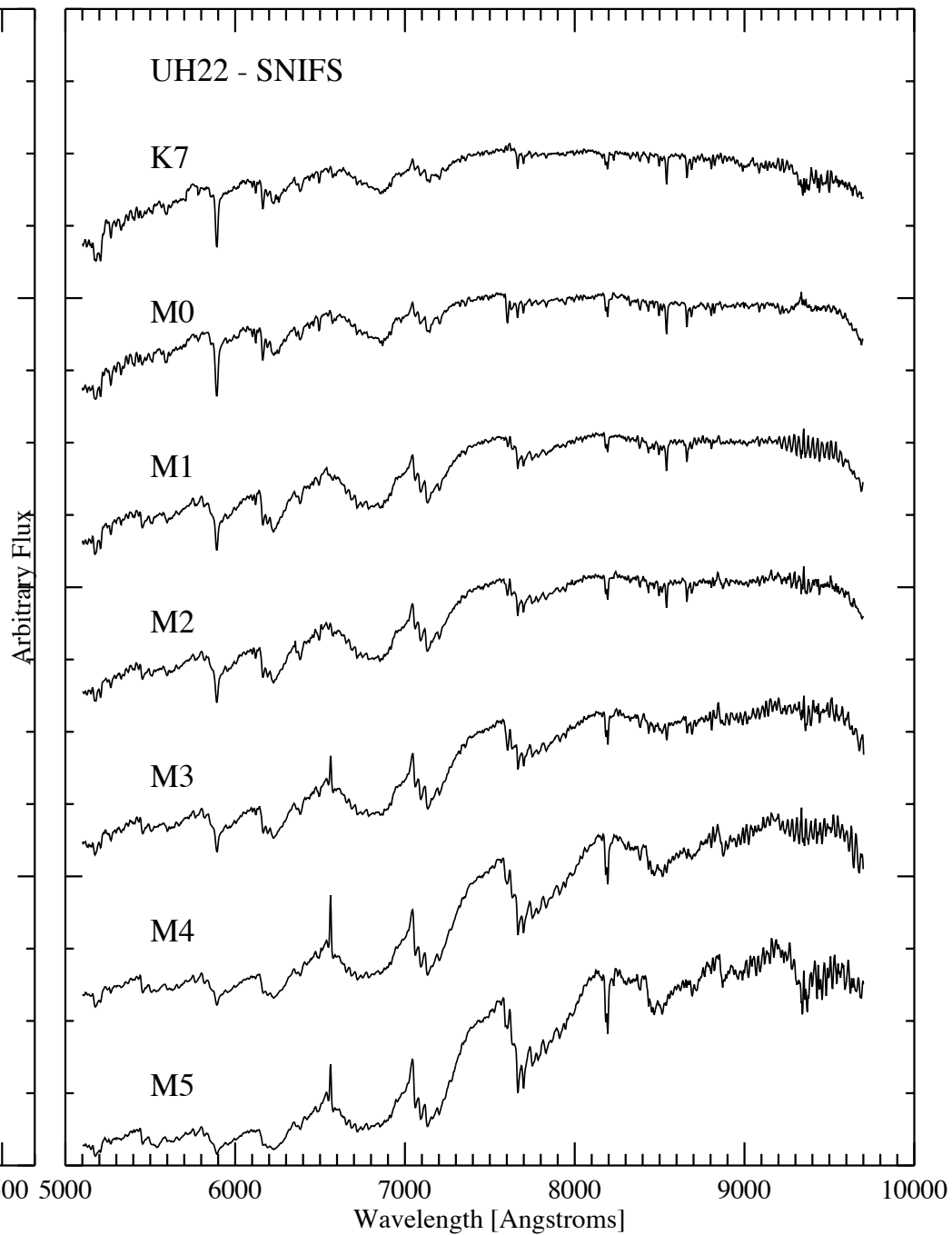
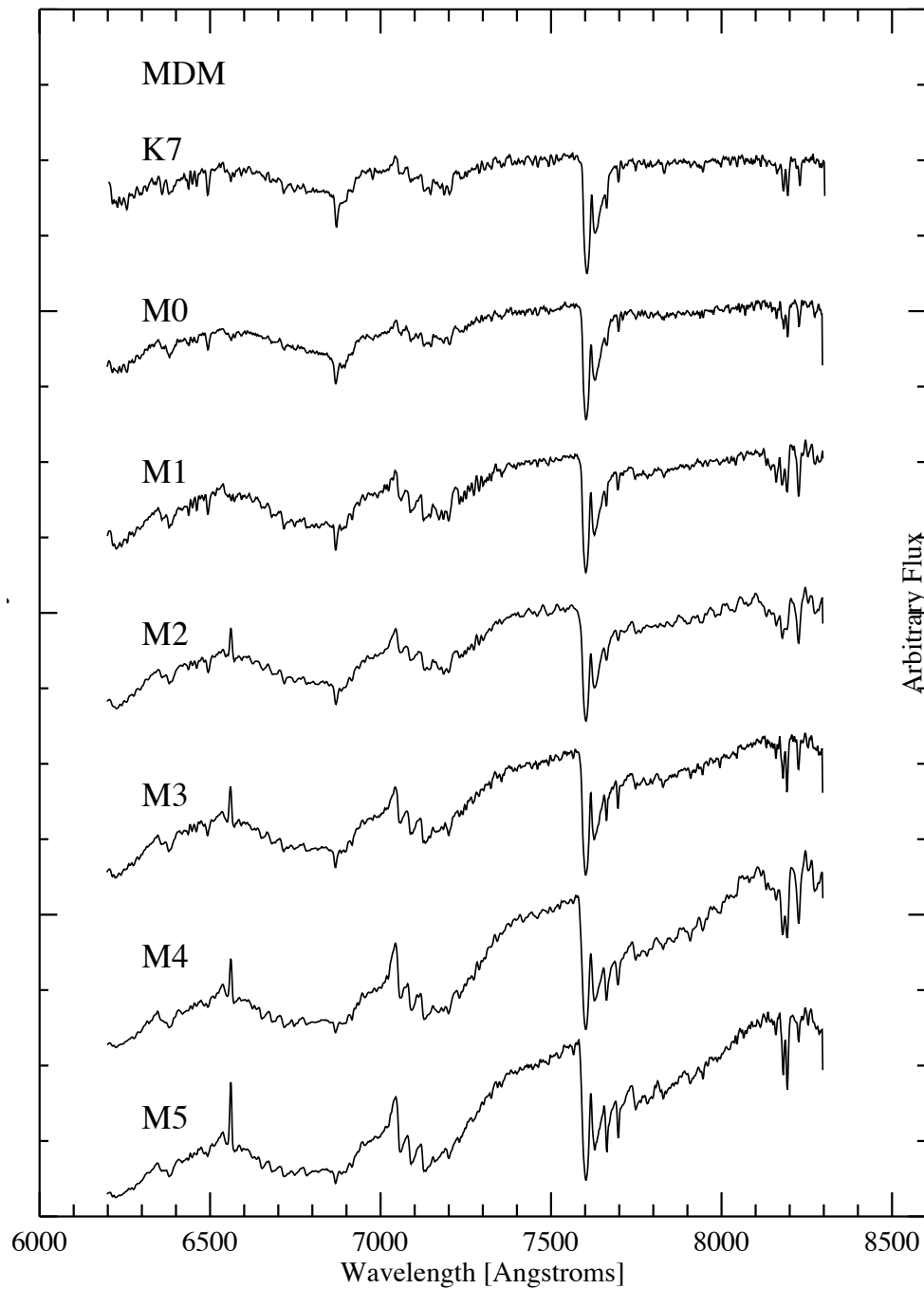


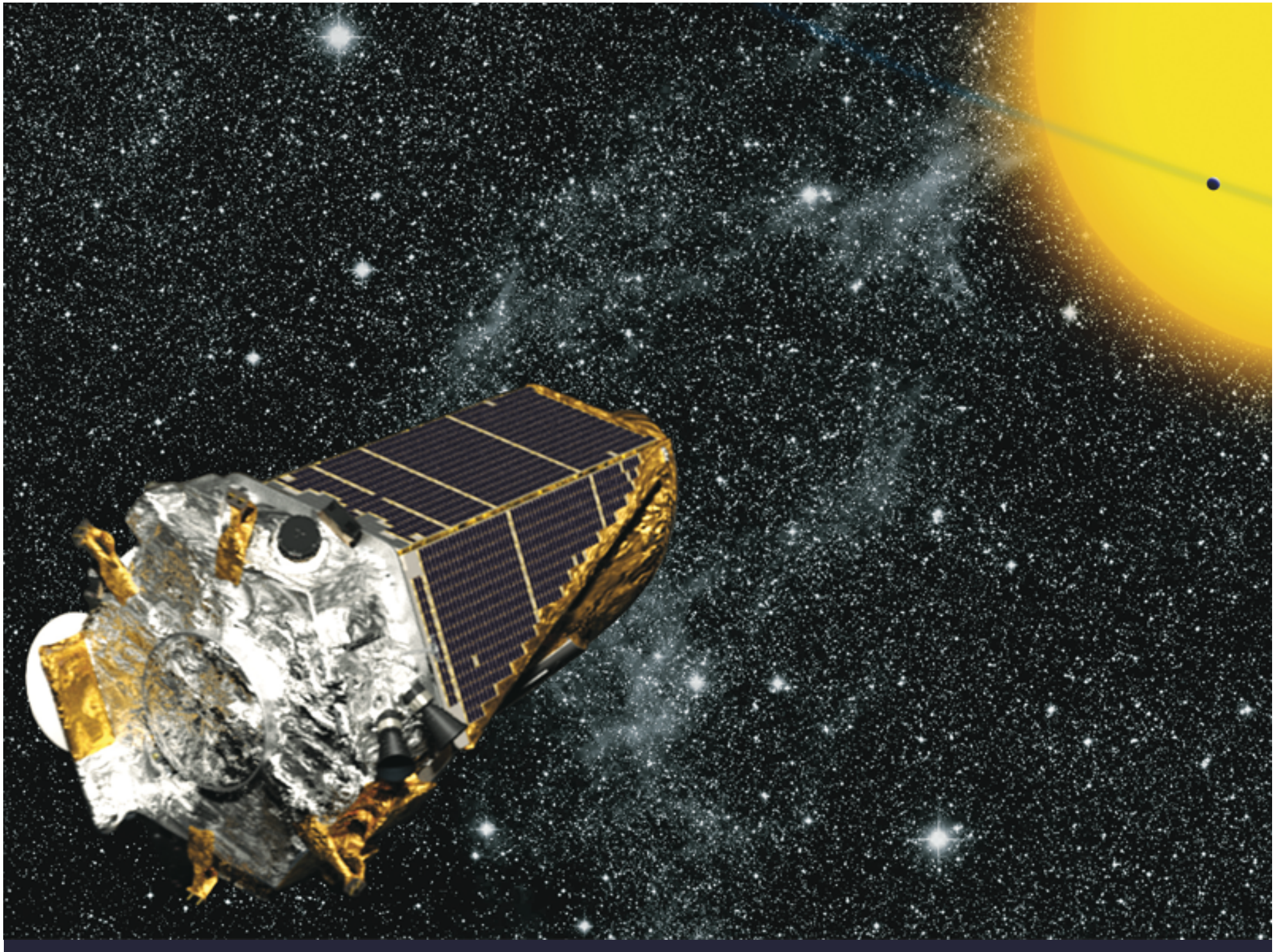




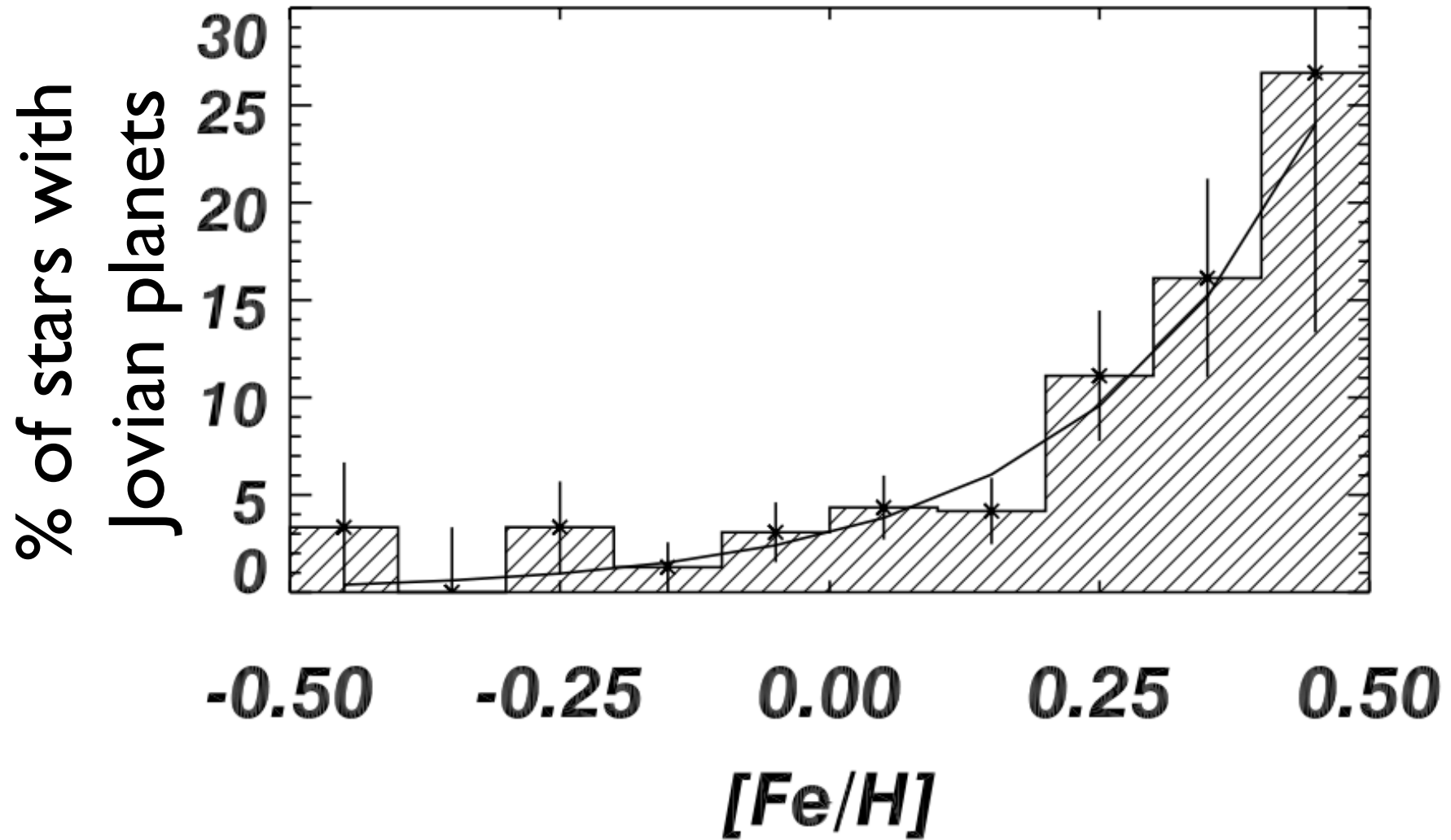




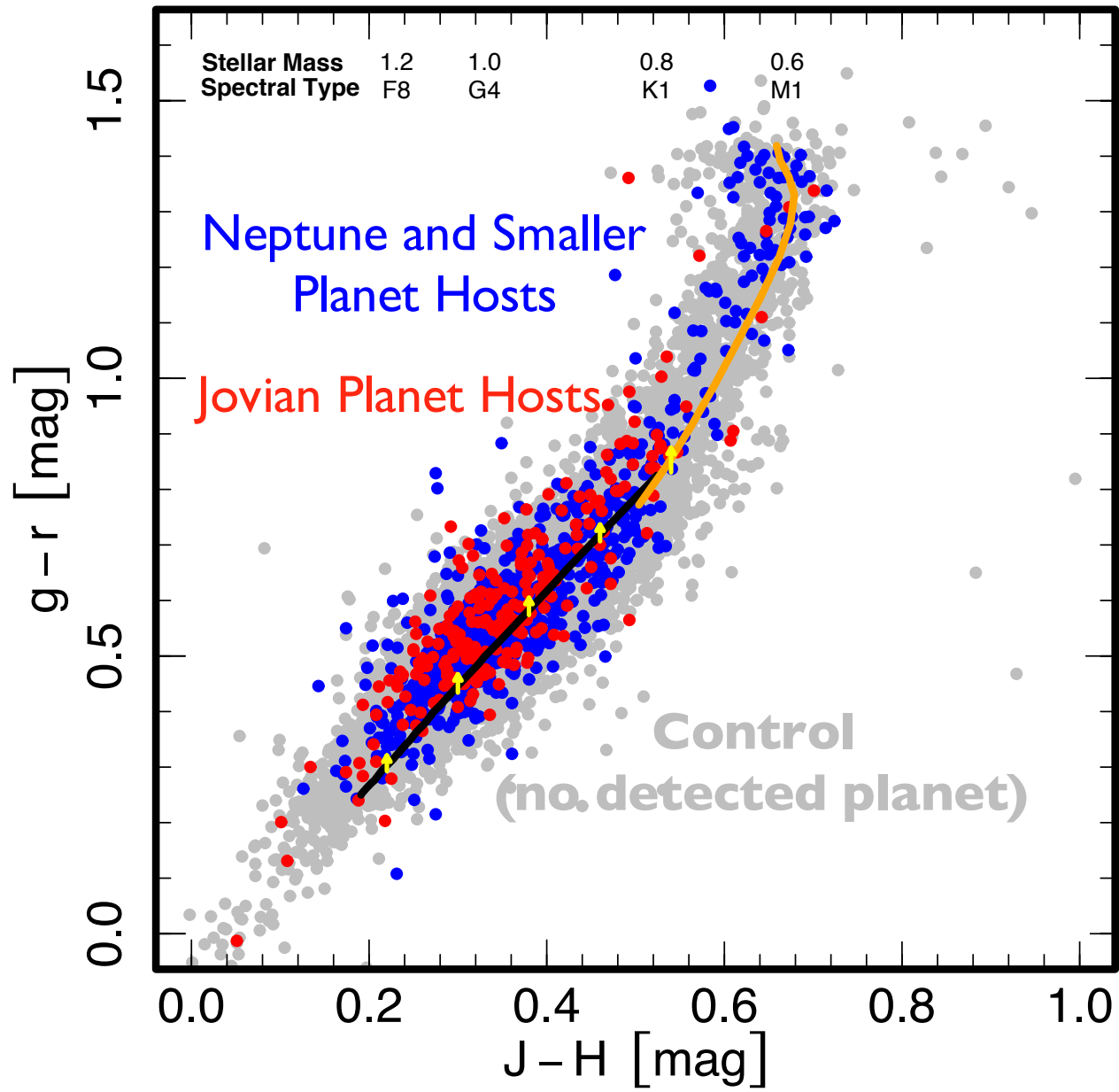




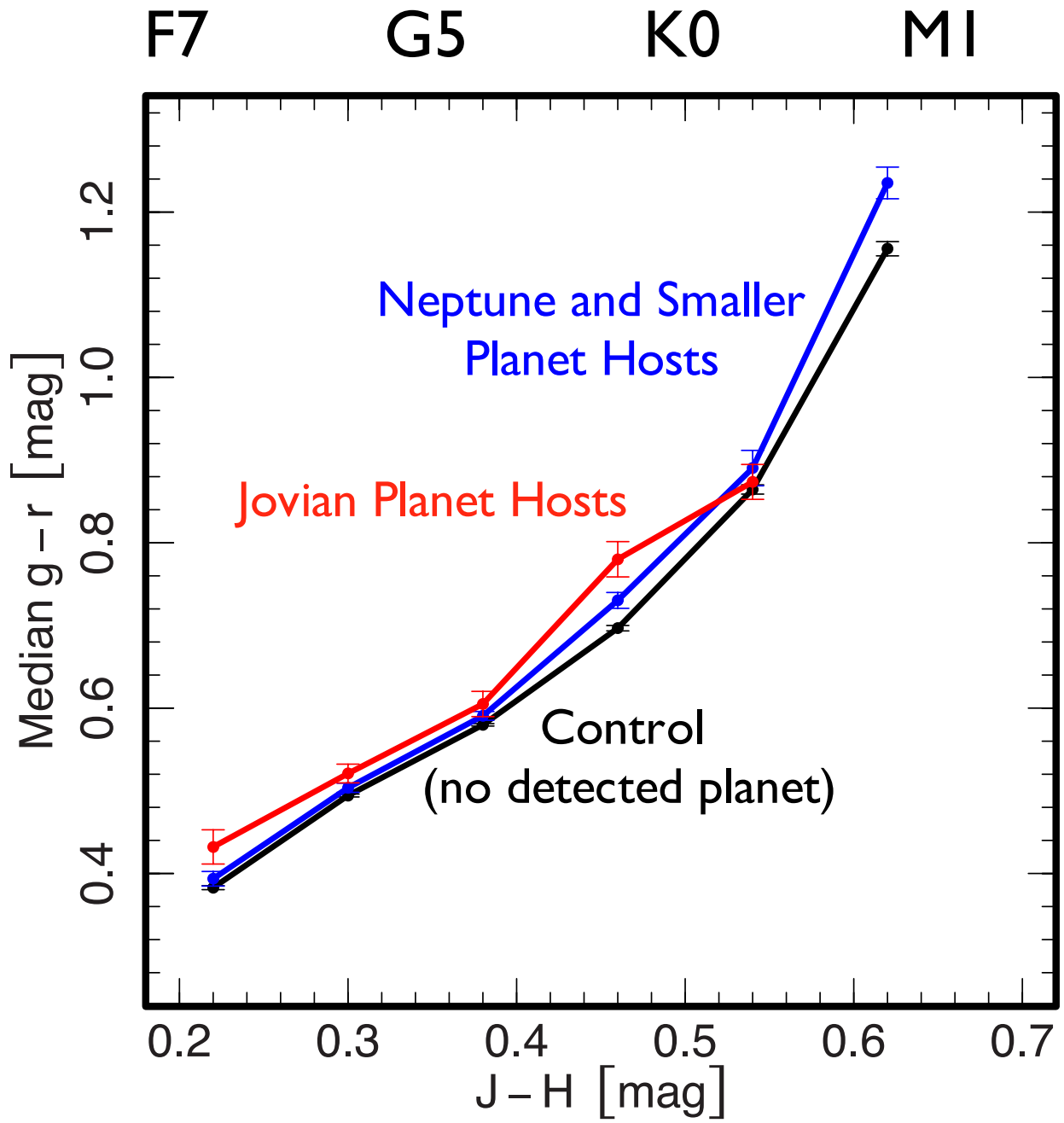
Jovian planet occurrence \propto stellar metallicity



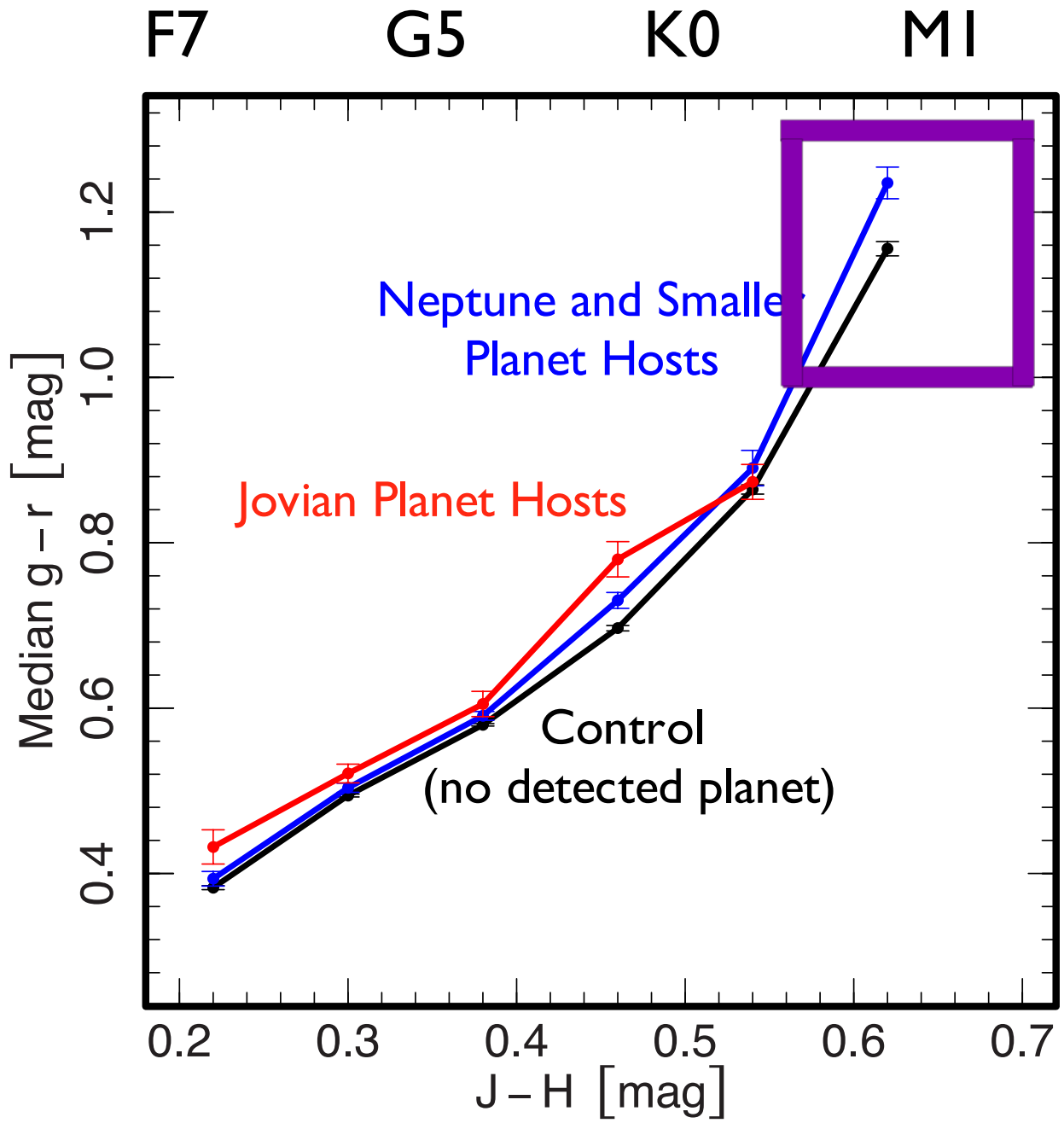
Fischer & Valenti (2005)



Schlaufman & Laughlin (2011)



Schlaufman & Laughlin (2011)

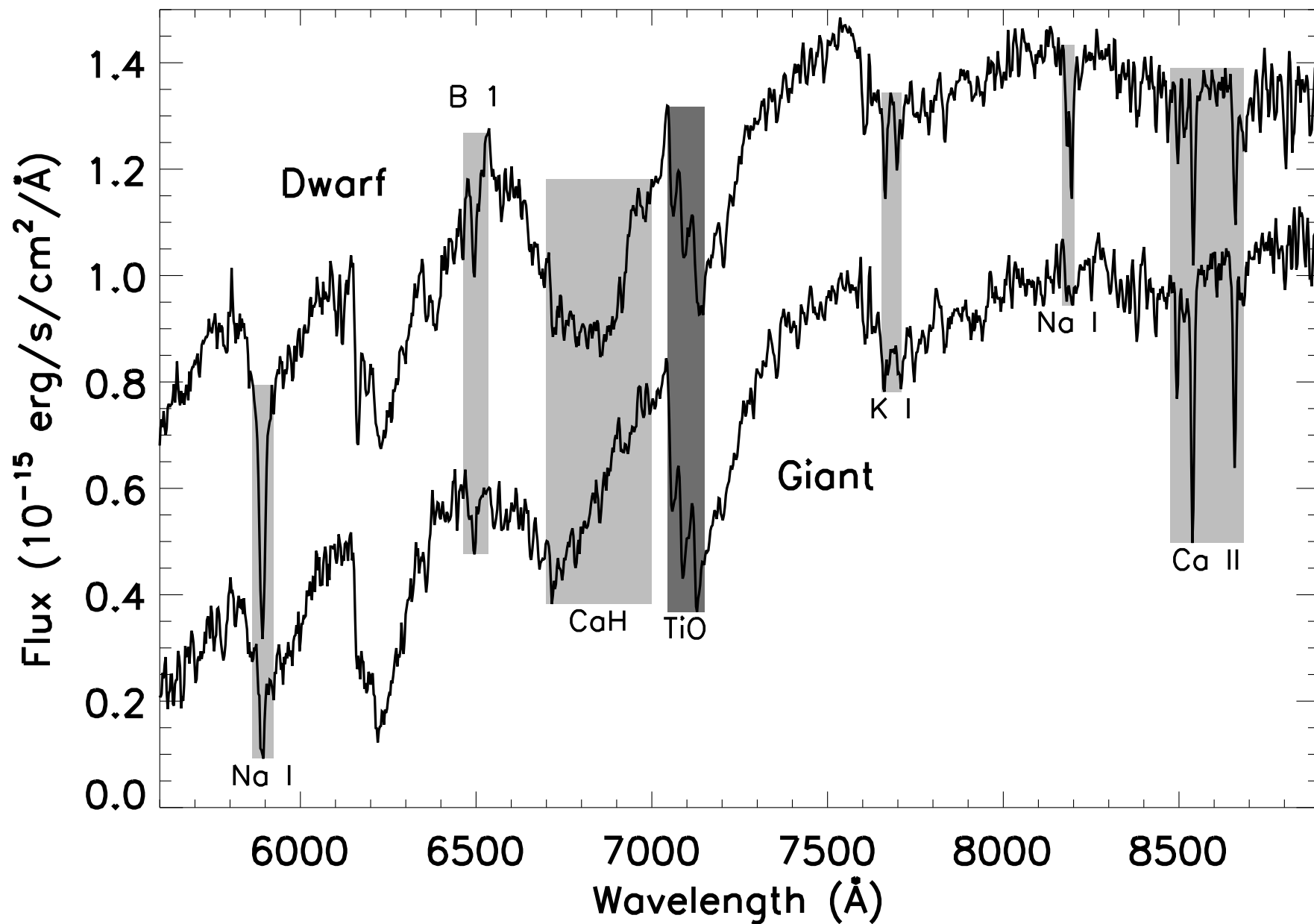


Schlaufman & Laughlin (2011)

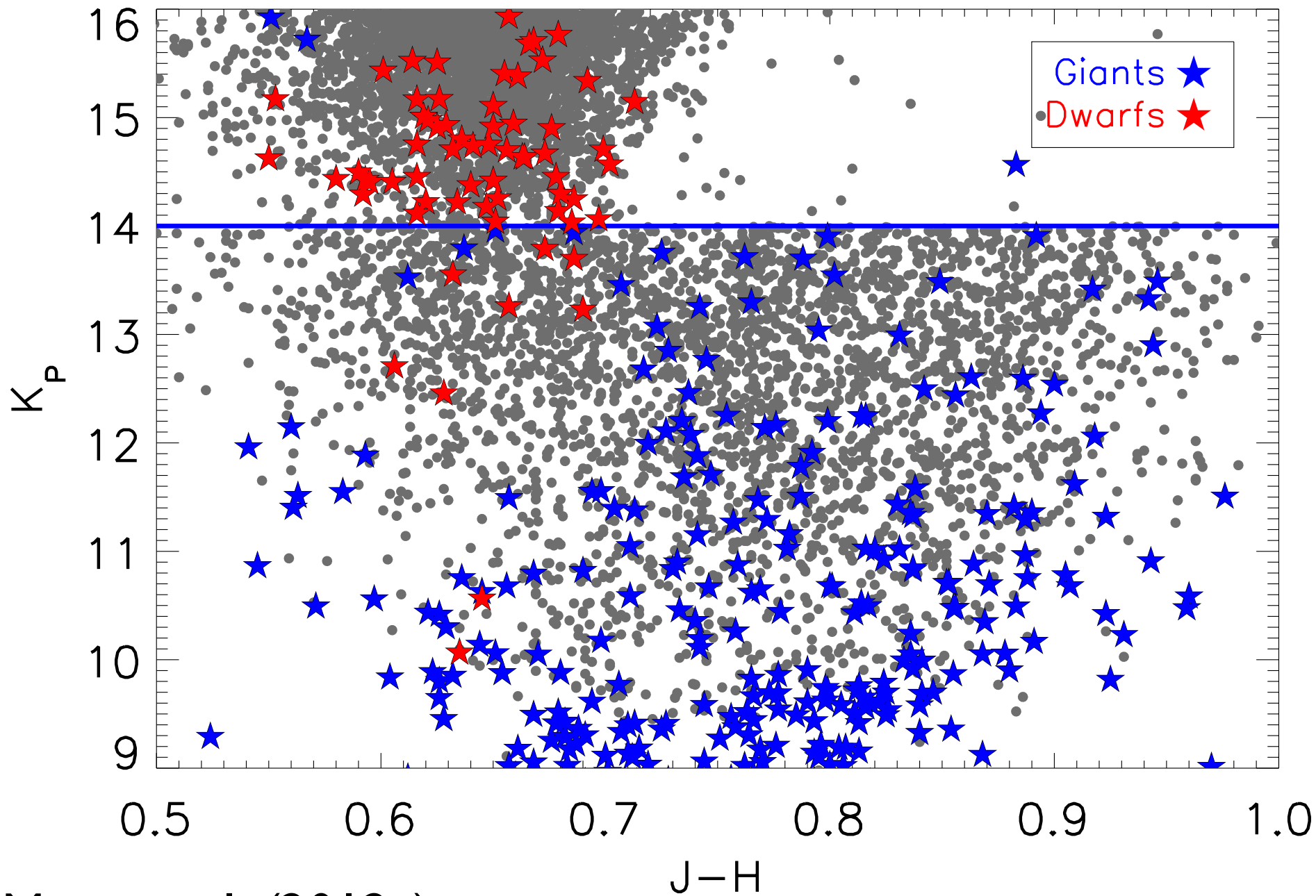
You are a better
astronomer than you
think you are.

Most astronomers don't
know what they are
doing either.

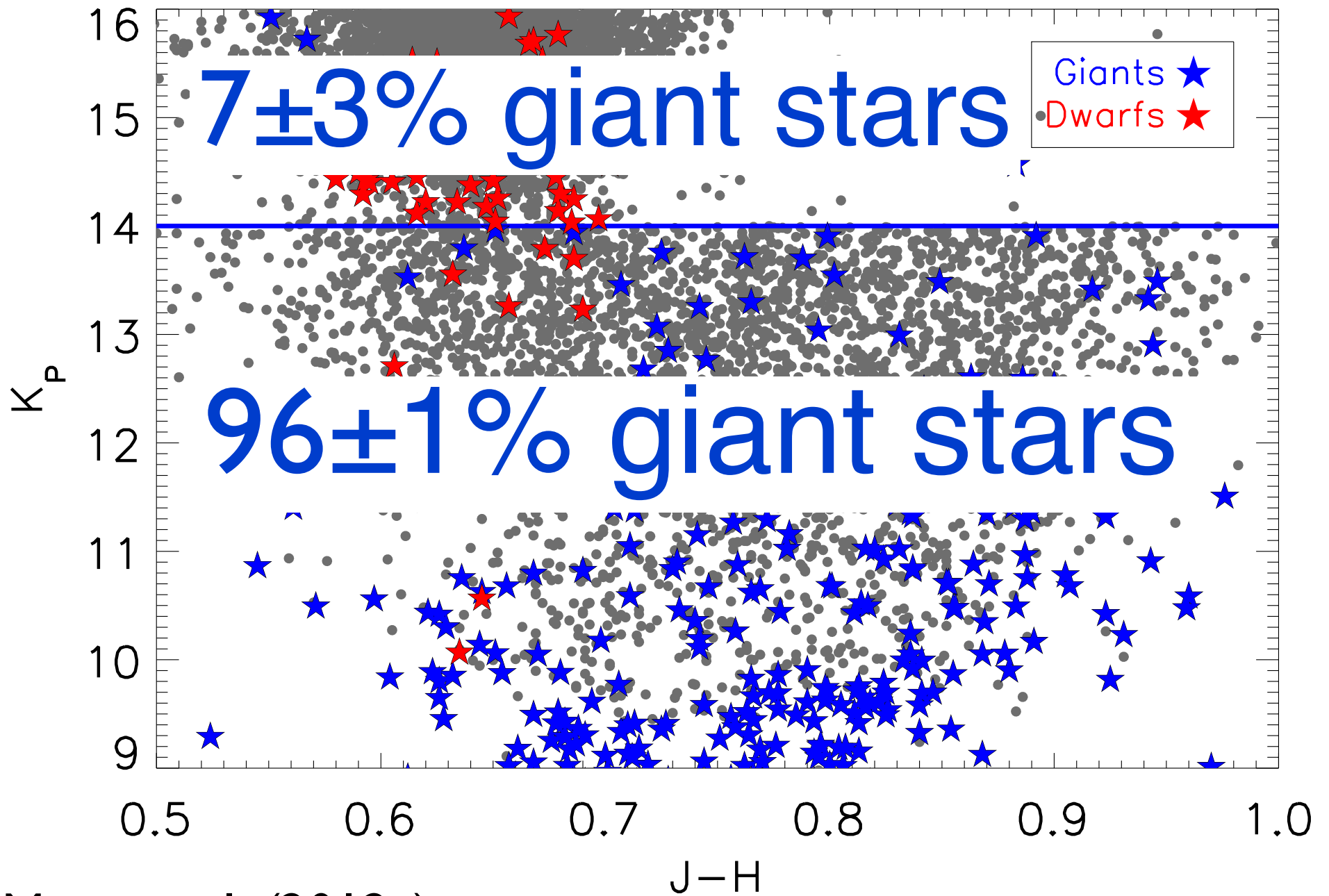




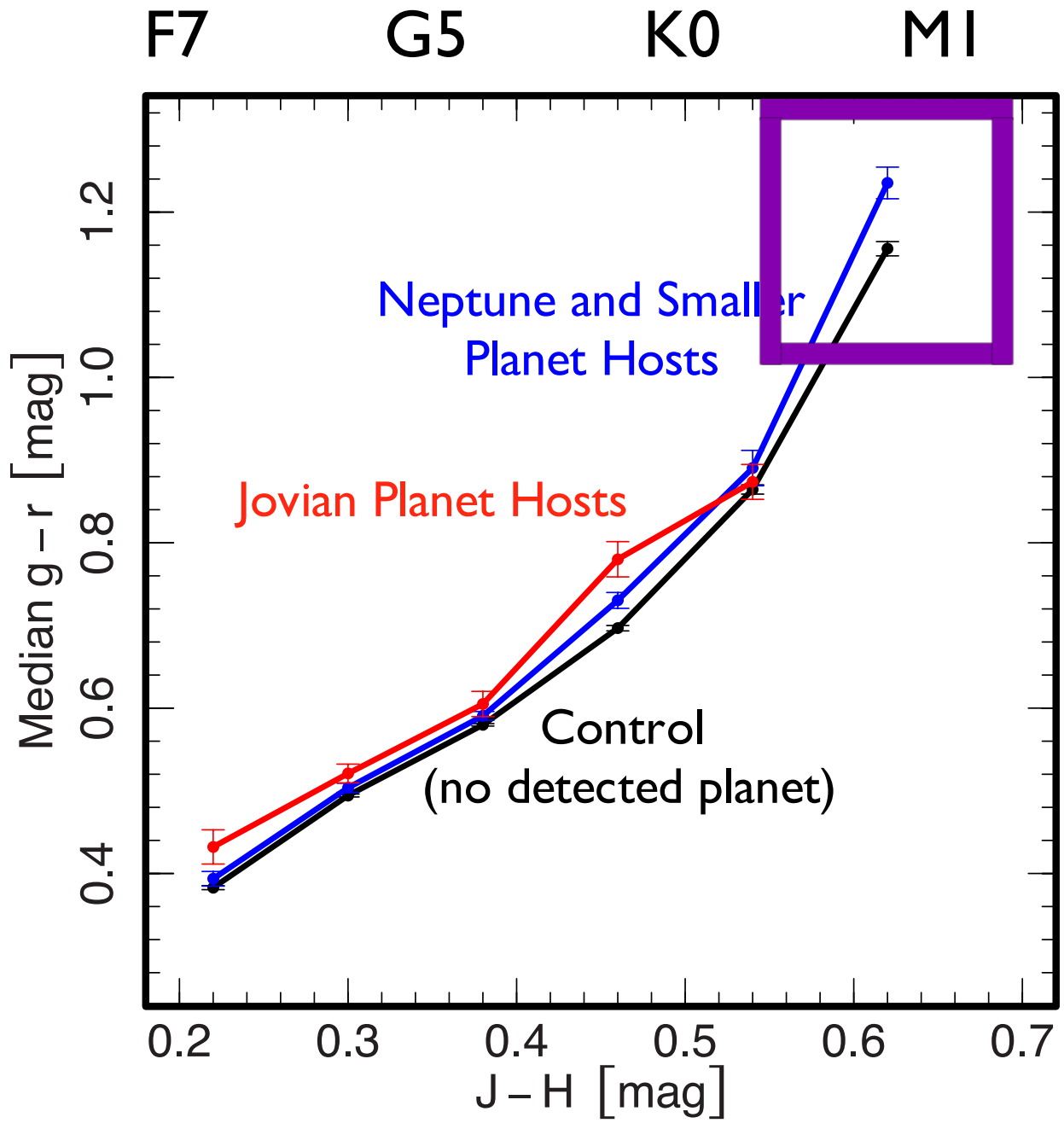
Mann et al. (2012a)



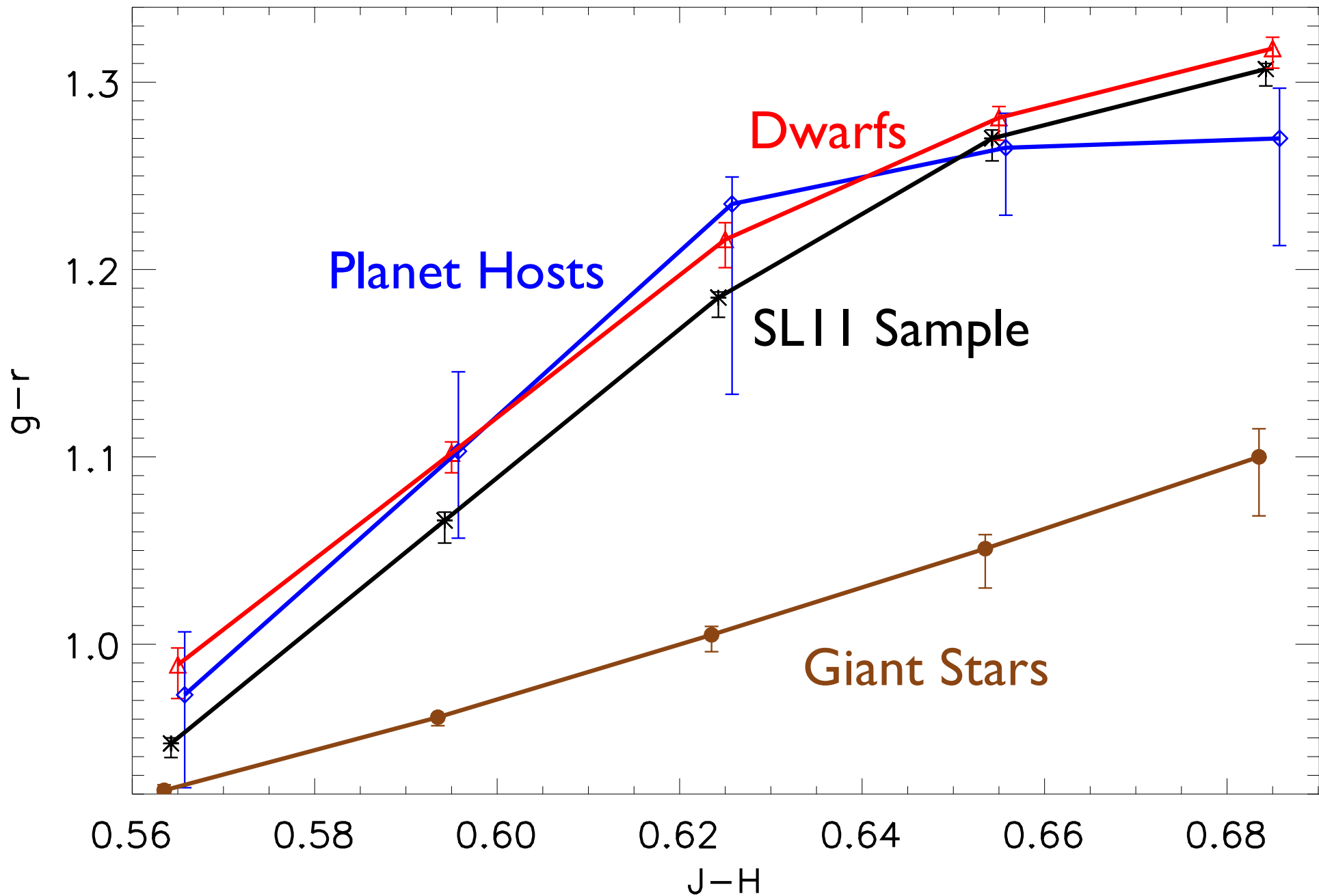
Mann et al. (2012a)



Mann et al. (2012a)



Schlaufman & Laughlin (2011)



Mann et al. (2012a)

Planet occurrence

~

$$\frac{\text{\# of planets detected}}{\text{\# of stars around which a planet could be detected}}$$

“Sounds like a pretty boring telescope proposal, to get thousands of spectra of stars without planets.”
-Mike Liu, Lowmass Lunch

Most astronomers don't
know what they are
doing either.

Kepler
Input
Catalog
Atlas of
Stellar
Spectra

Team:

Andrew Mann (PI)

Adam Kraus

Matt Walker

John Johnson

Hectospec/Hectochelle

- 240-300 fibers
- $R \sim 1300$ for 350-1000nm
- $R \sim 32,000$ for selectable 150 angstrom regions
- 0.8 square degree FOV

