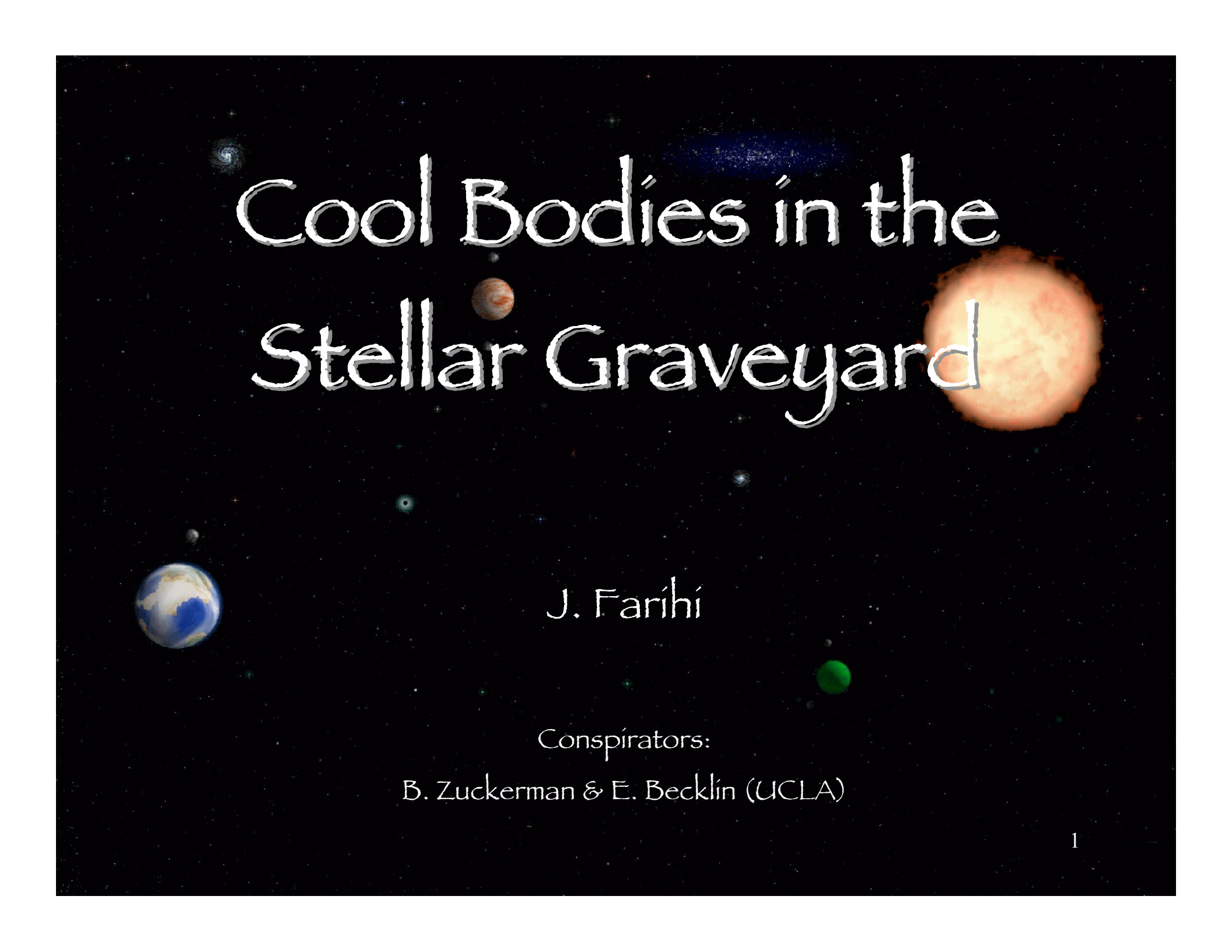


Cool Bodies in the Stellar Graveyard



J. Farihi

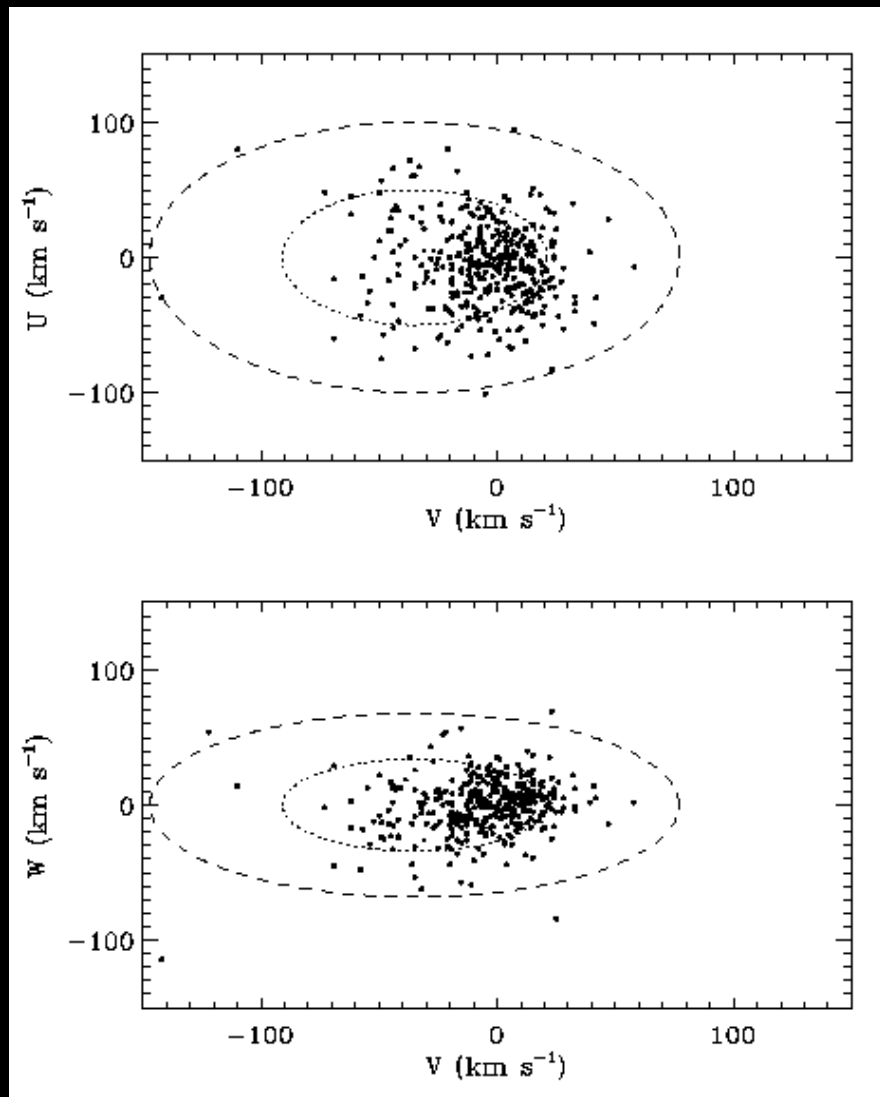
Conspirators:

B. Zuckerman & E. Becklin (UCLA)

White Dwarfs in the Infrared

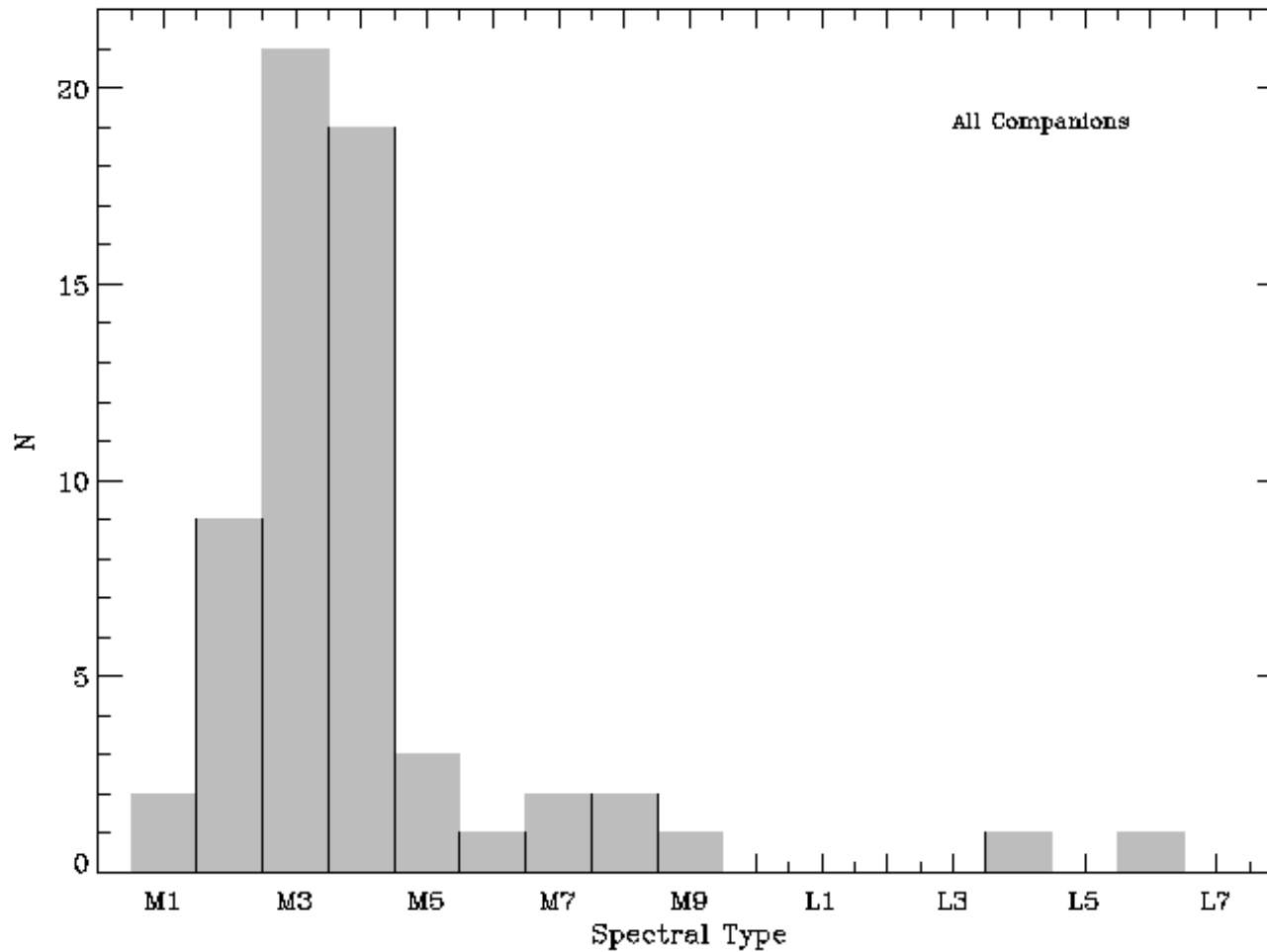
- Advantages + Motivation
- Searched 371 white dwarfs for companions
- Multiple Methods over 17 years.

Kinematical Ages



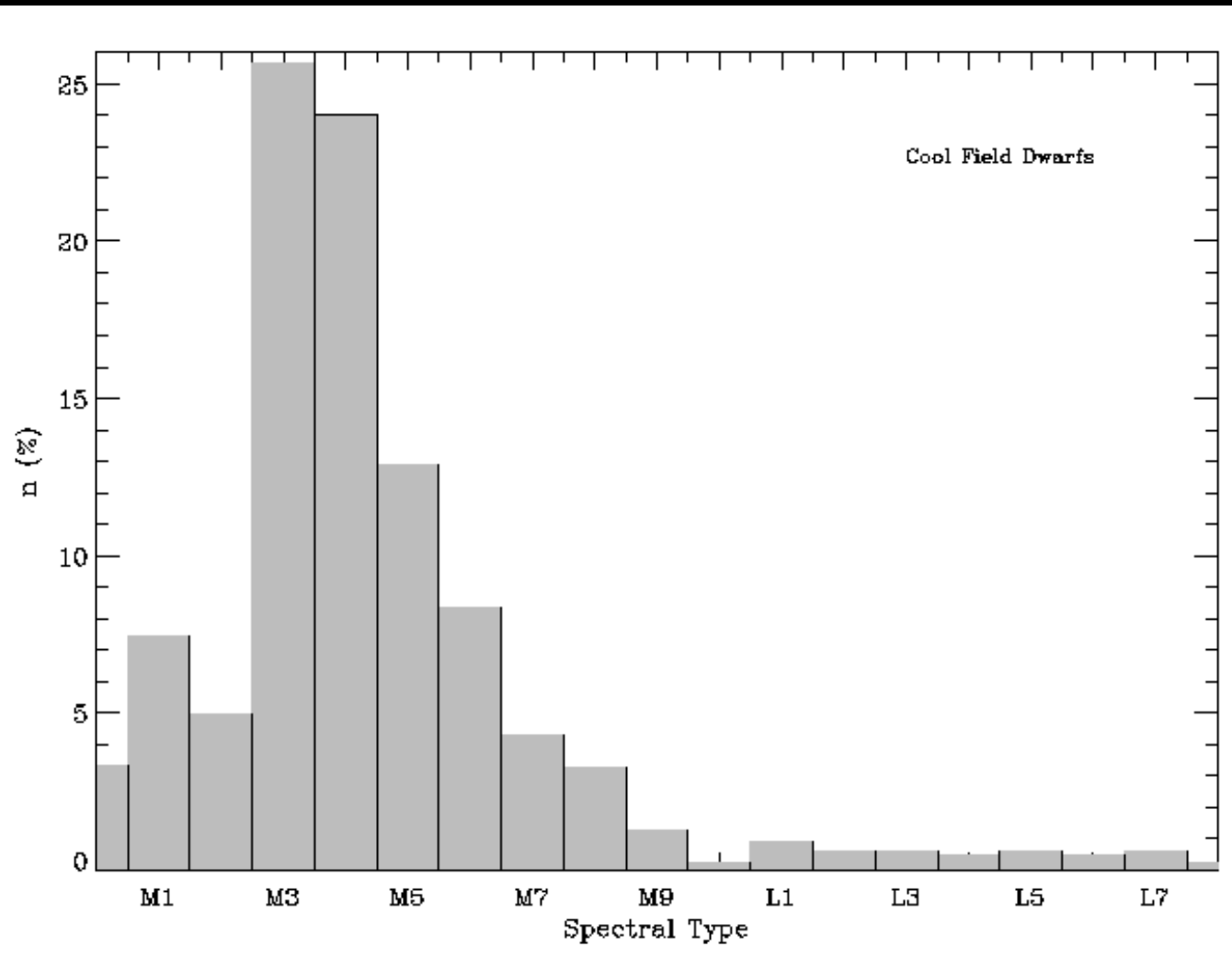
Companion Frequency

(Farihi, Becklin, & Zuckerman 2005, in press)



Field Dwarf Frequency

(Reid & Hawley 2000, Cruz et al. 2003)



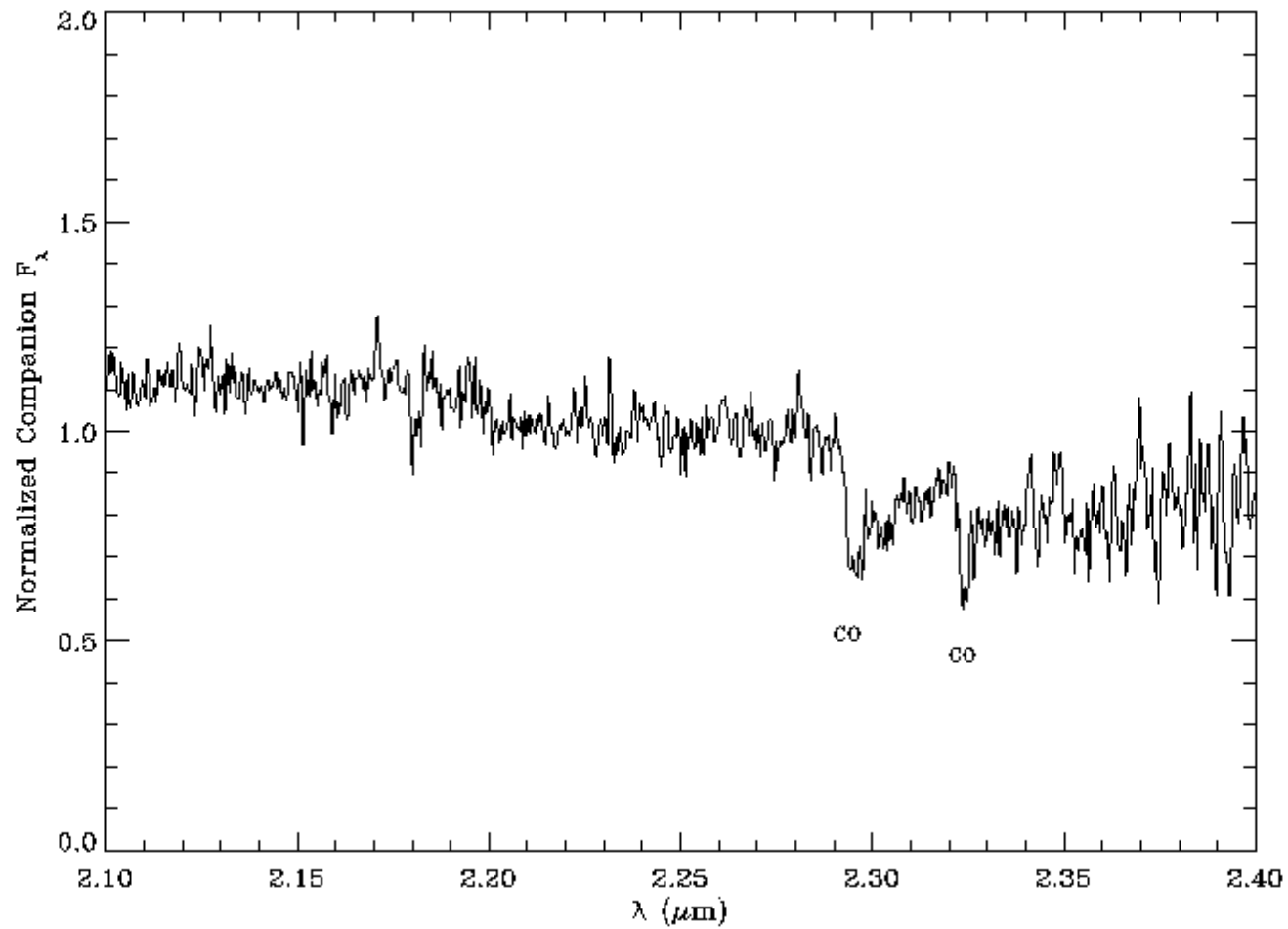
2 Ultracool Degenerates

- GD 392B (Farihi 2004)
 - Ultracool white dwarf companion

- GD 1400B (Farihi & Christopher 2004)
 - L6-L7 brown dwarf companion

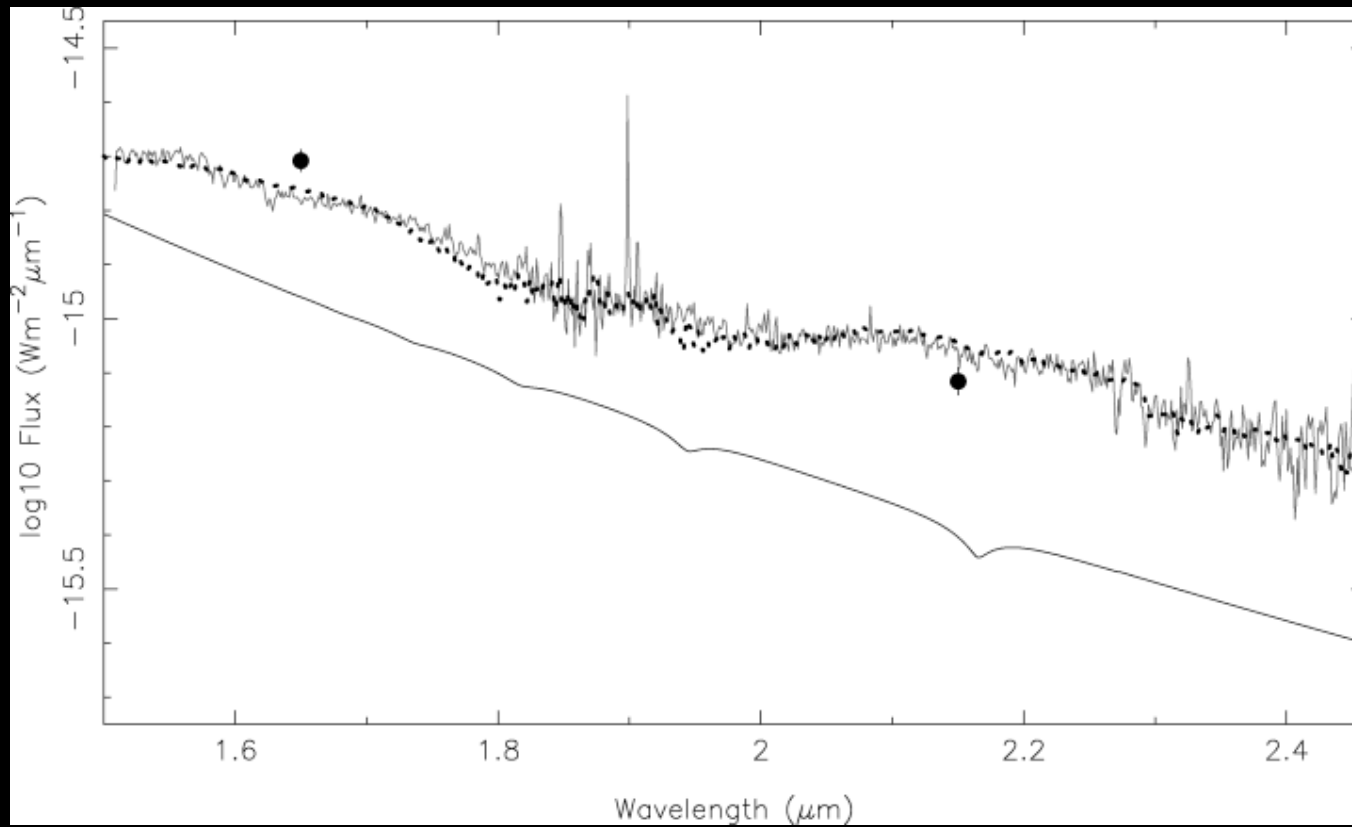
Keck / NIRSPEC

(Farihi & Christopher 2004)



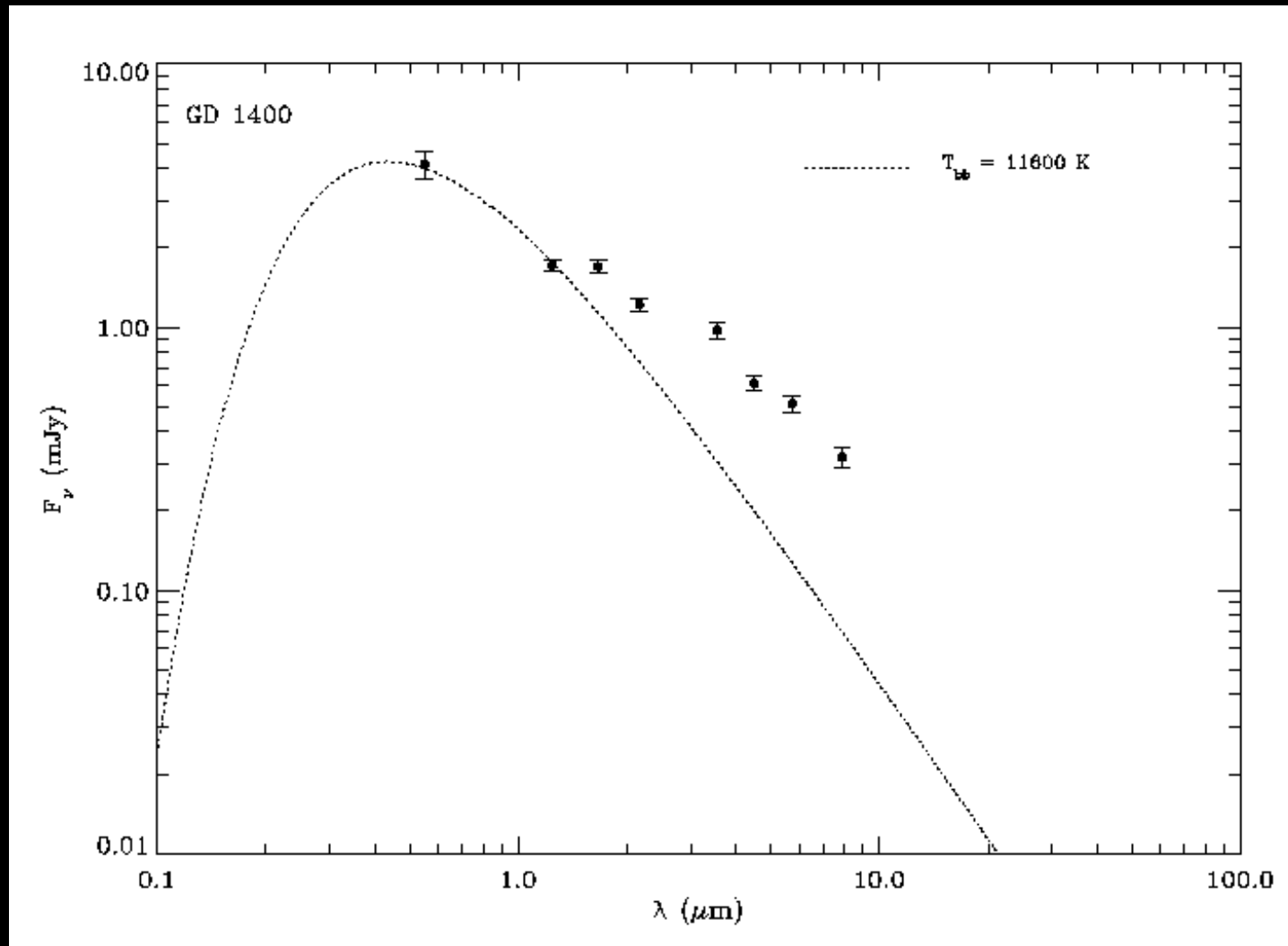
NTT / SOFI

(Dobbie et al. 2005)



Spitzer / IRAC

(Farihi, Zuckerman, & Becklin, submitted)



Origin or Evolution?

- Formation - disk or binary?
- Orbit - growth or decay?
- Mass - primordial or contaminated?

Ongoing Work

- Image 1-5 AU region with HST / ACS
 - Sample of ~100 unresolved WD+RD pairs

- Spitzer / IRAC imaging
 - Can detect ~300-500 K companions



Fin

(let's eat!)