

DISK EVOLUTION / PLANET FORMATION IN THE BINARY ENVIRONMENT



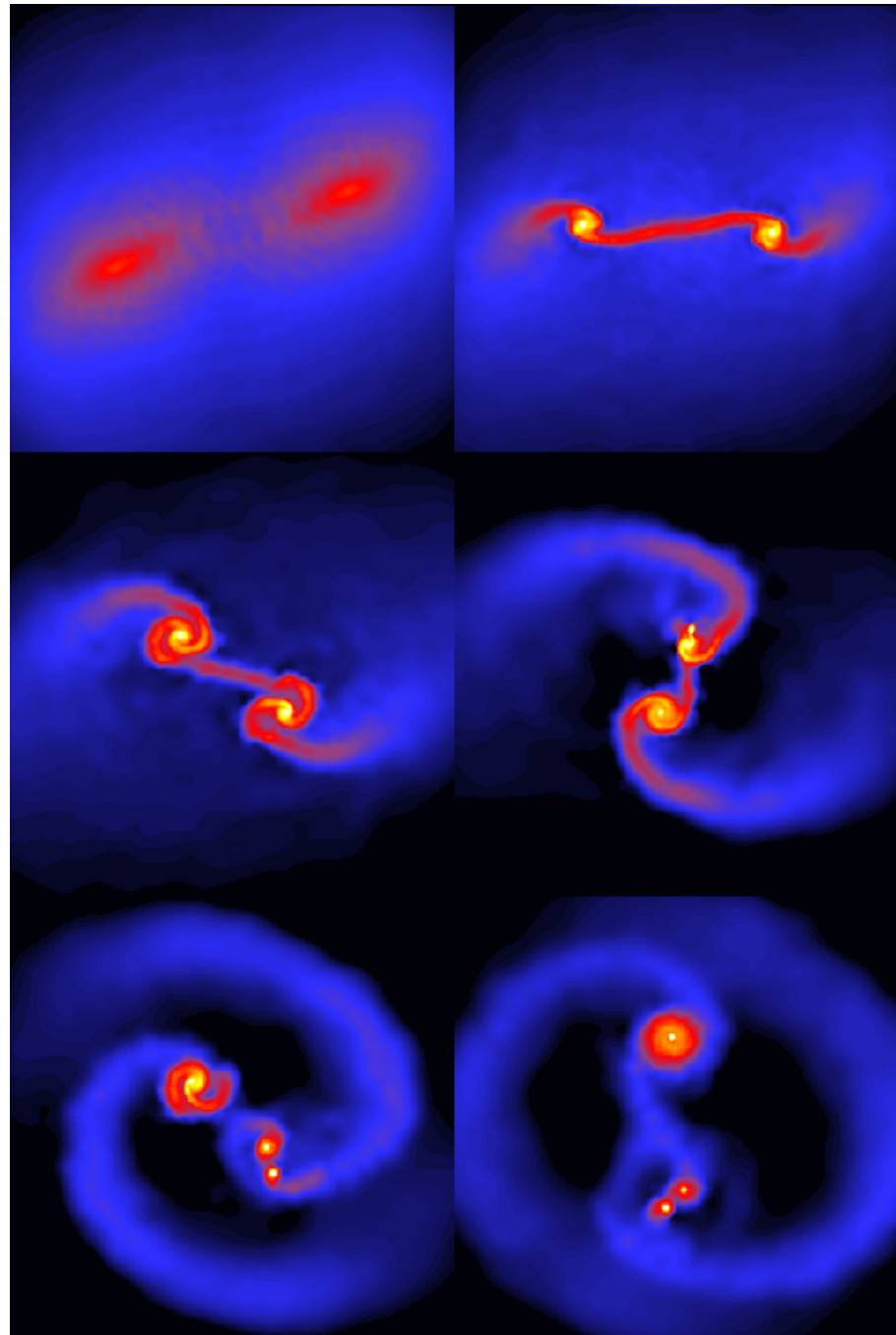
Lisa Prato – Lowell Observatory – Wednesday, September 6, 2017

Gail Schaefer, Tom Allen, Mike Simon, Brian Skiff, Ryan Muzzio, Ian Avilez, Nuria Wright-Garba, Lauren Biddle, Larissa Nofi, Joe Llana, Kendall Sullivan, Kyle Lindstrom, Sean Graham

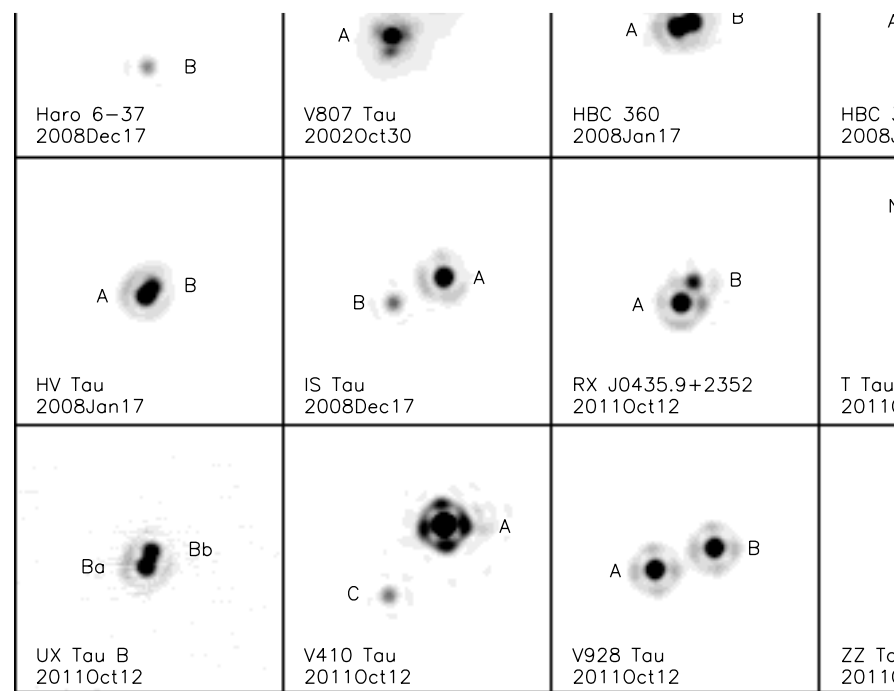
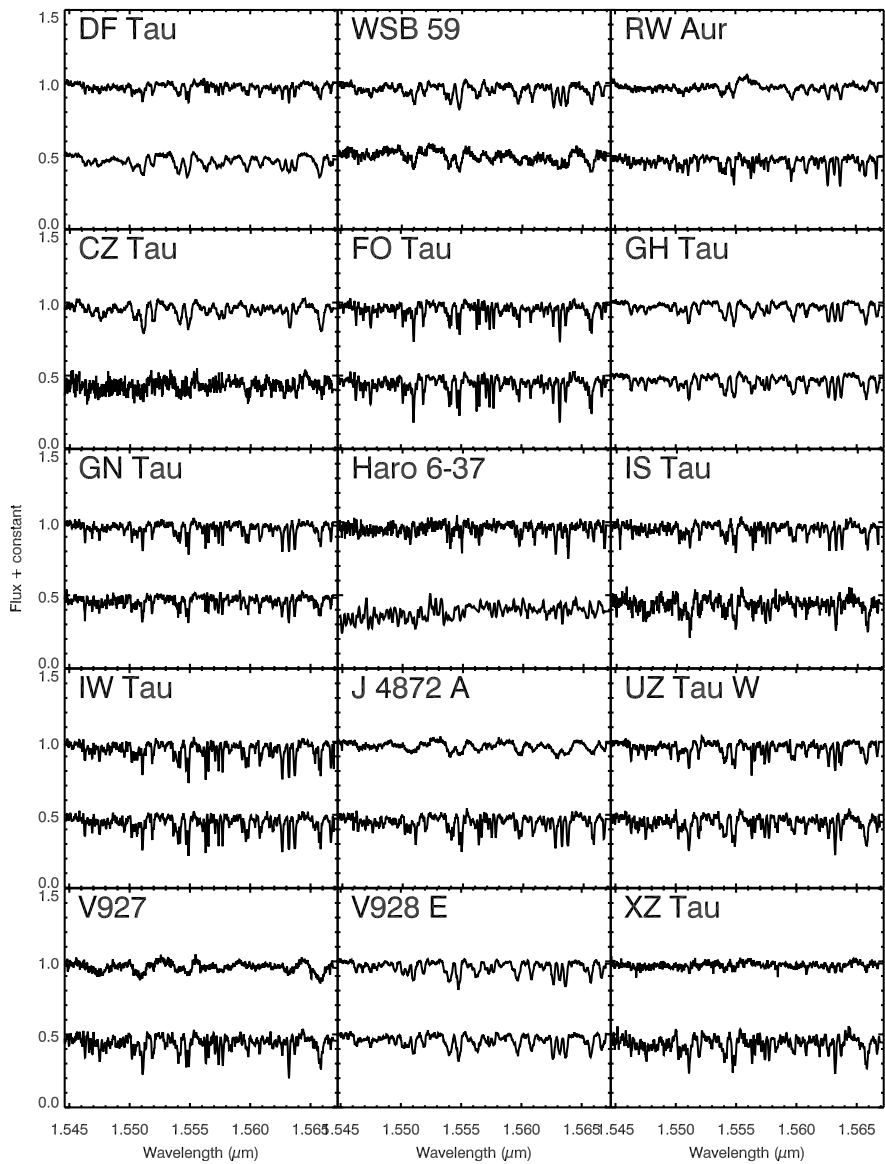
**BINARY
FORMATION**

DISK EVOLUTION

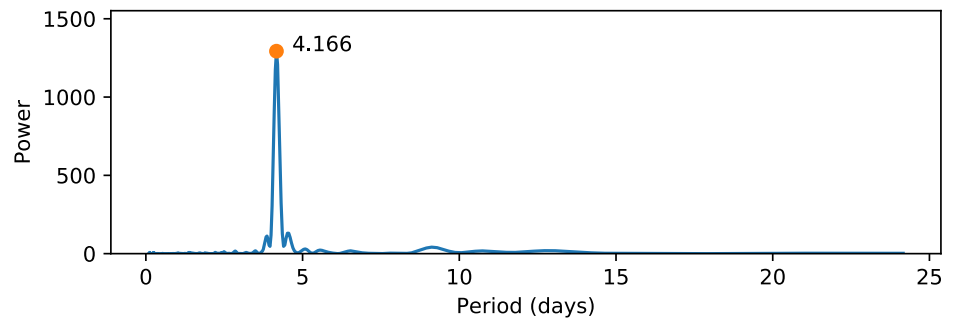
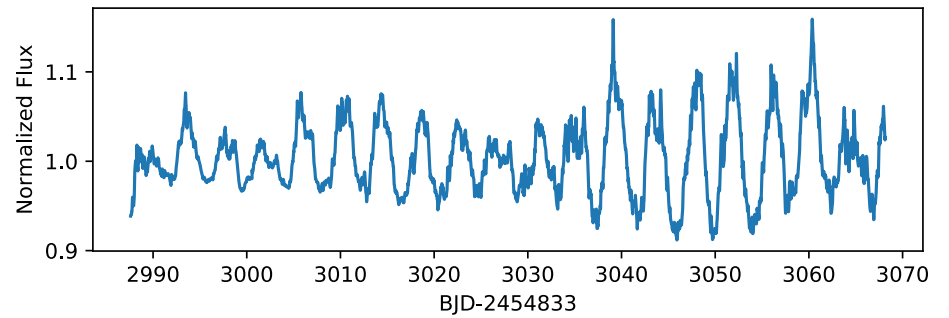
**PLANET
FORMATION**



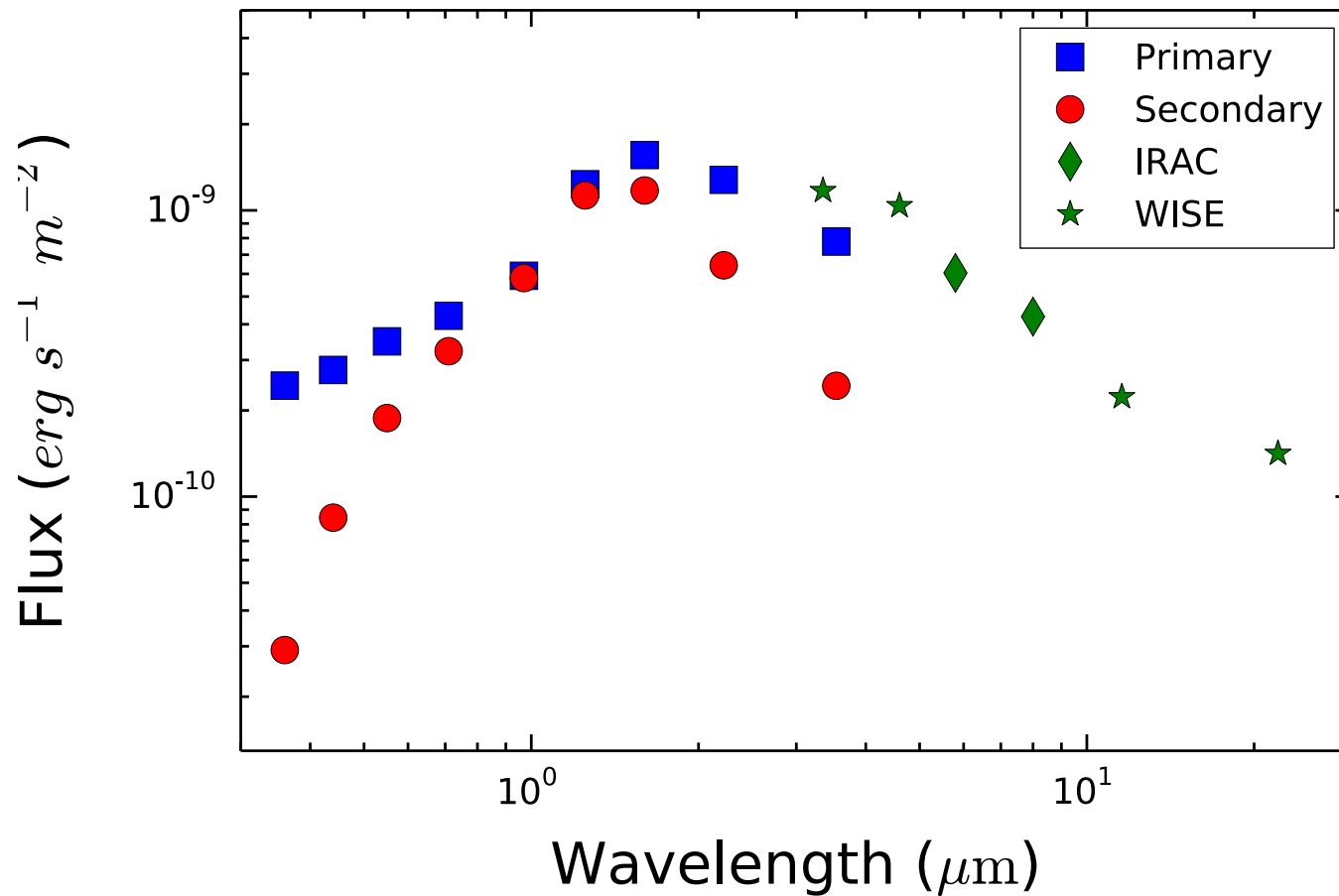
Bate et al. 1995



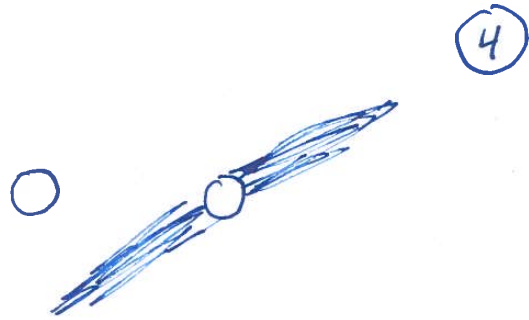
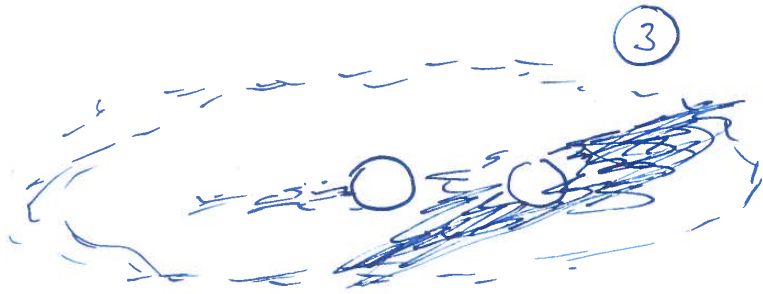
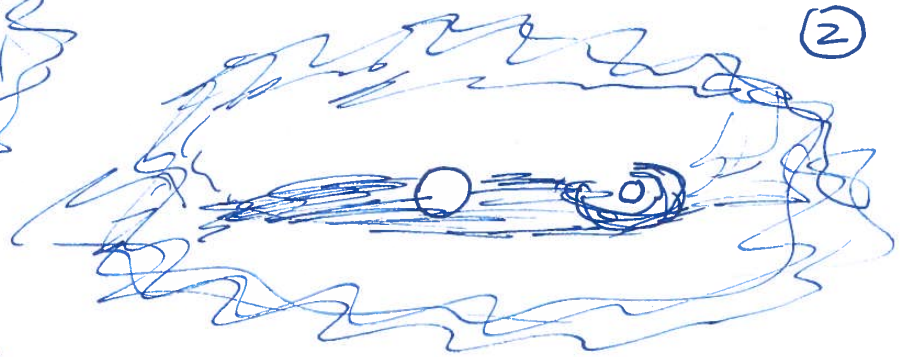
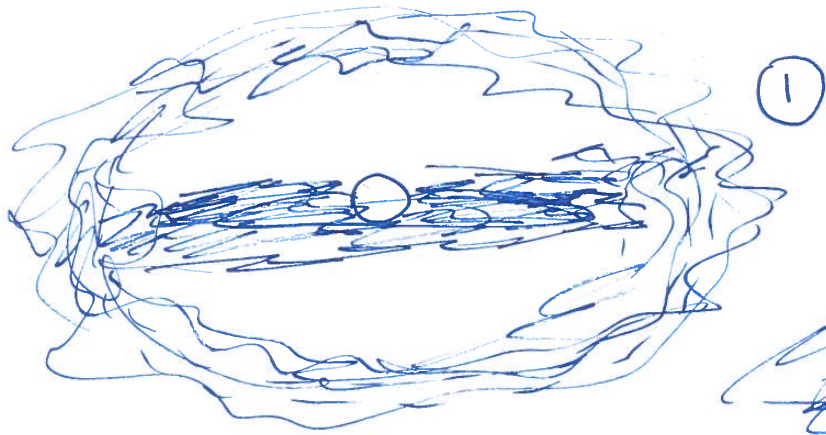
ZZ Tau, 247843485



DF Tau — Allen et al. (2017)



Equal component mass binary with a disk around only one star!



DF Tau ?

- * do equal mass binaries always have unequal disk evolution?**
- * do unequal mass binaries have more equal disk evolution?**
- * comparison of cloud core angular momentum and binary mass ratio?**
- * implications for planet formation could be profound**
- * ALMA resolved images of disks will provide deeper insight as well**