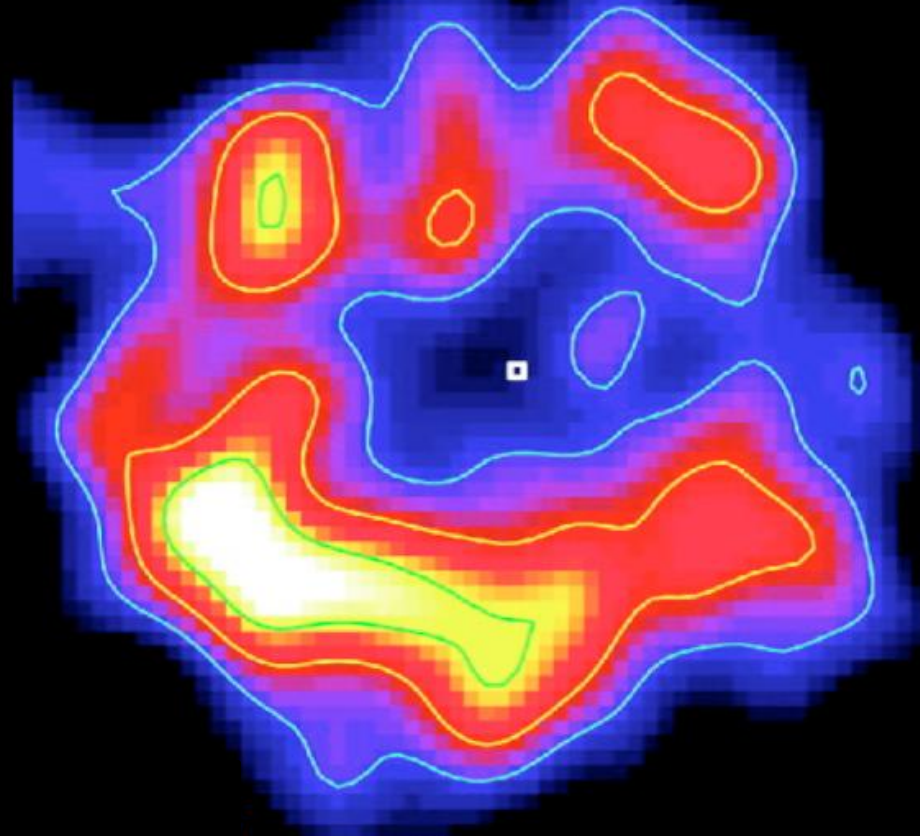


- Debris disks are leftovers of planetary formation
- Disk structures => constraints on planet(s)

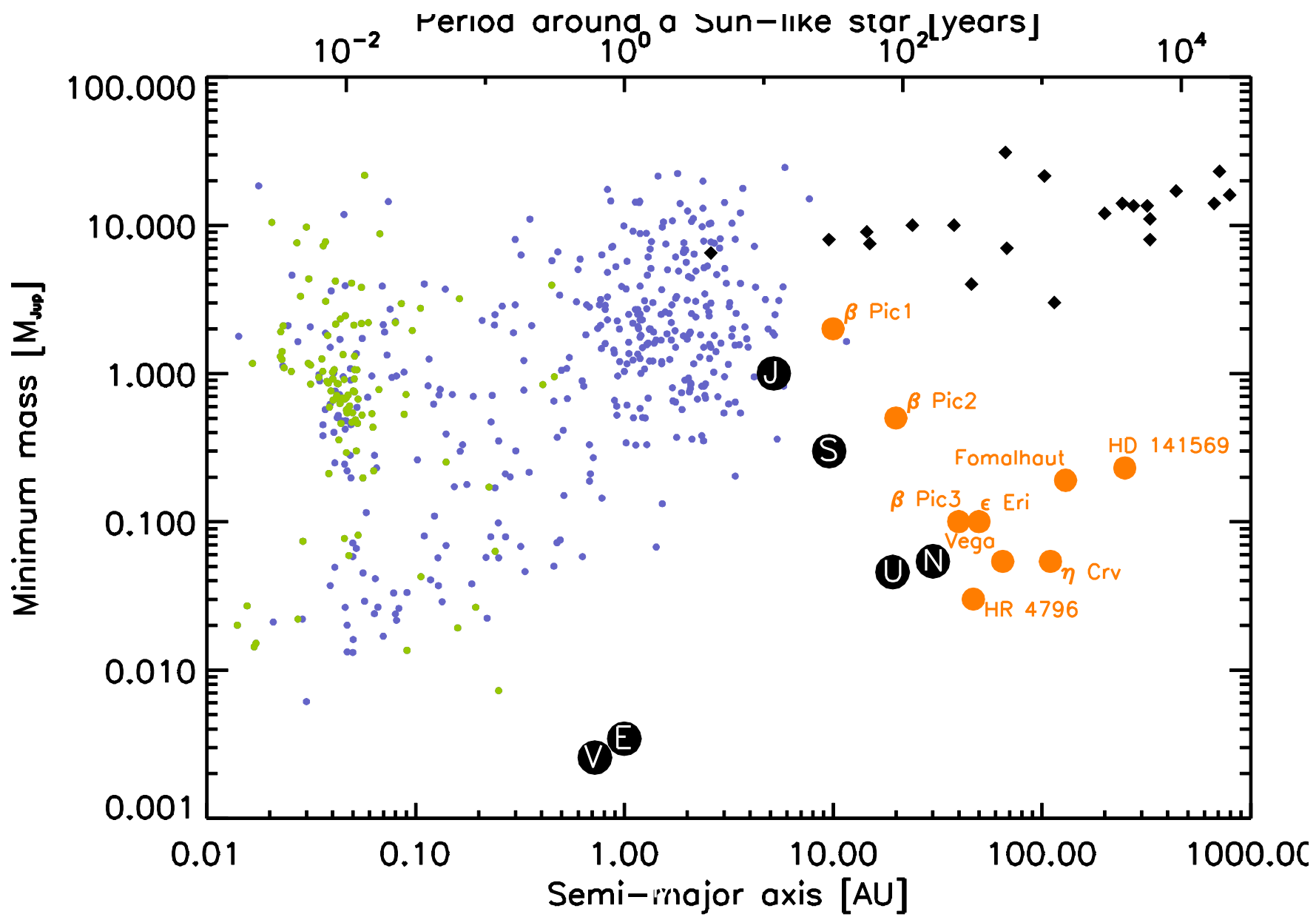
$\epsilon$ -Eri 850  $\mu\text{m}$

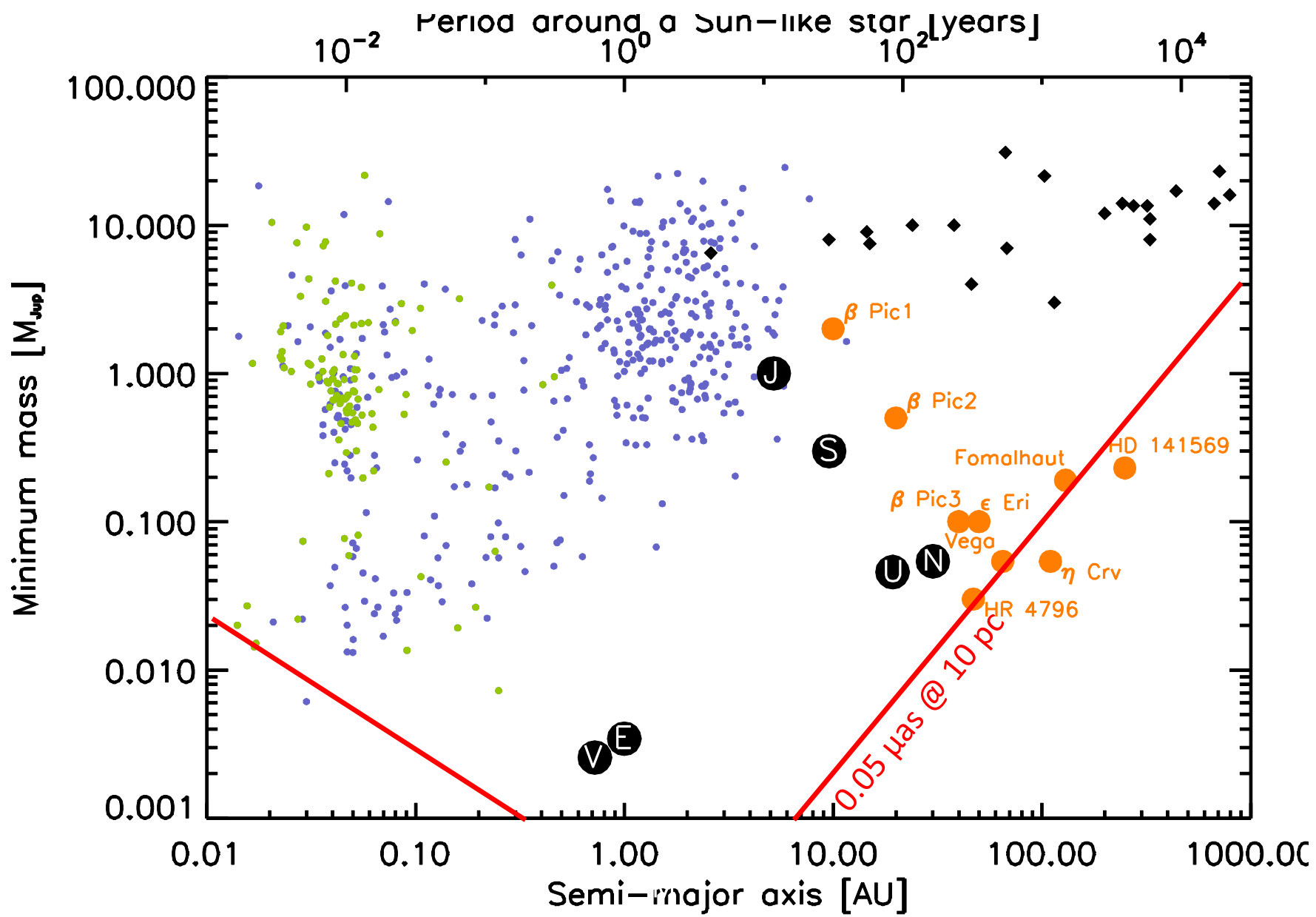


40 AU

(Greaves et al.  
1998; 2005, JCMT)

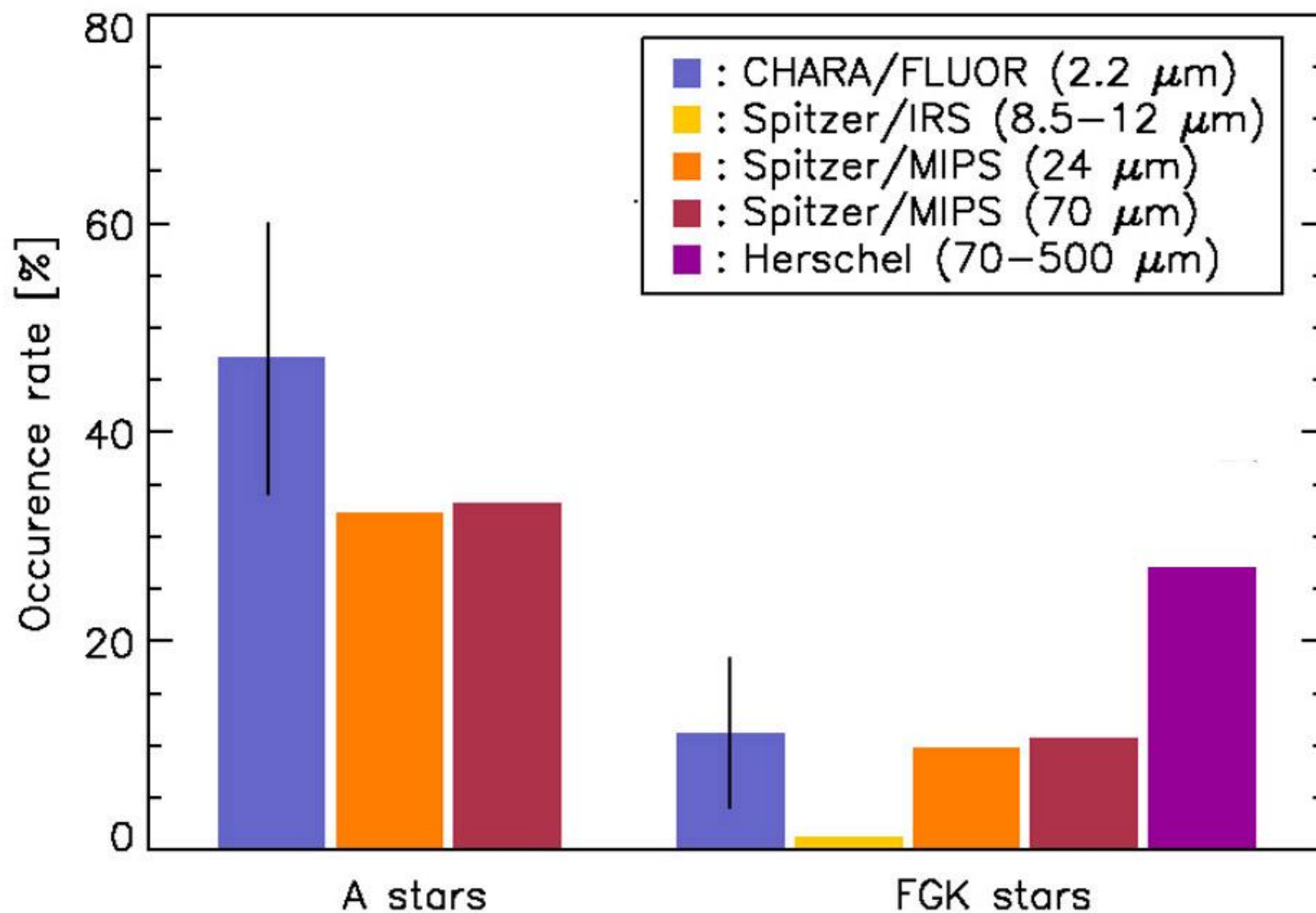
- Debris disks are leftovers of planetary formation
- Disk structures => constraints on planet(s)







# Warm/hot disks around nearby stars



Absil et al. in prep and Marshall et al. in prep

# Debris disks around nearby stars

- Out of the NEAT catalogue (200 targets):
  - 18 debris disk targets with known planets (~10%)
  - 34 debris disk targets with no known planet (~15%)
- Inner disks (around the HZ):
  - Very few is known (1% from Spitzer, 10% from IR interf.)
  - Tiny total mass ( $10E-9$  to  $10E-5$  Earth mass)
- Outer disks (> 5 AU):
  - More disks known and resolved (~25%, Herschel)
  - Larger mass (~  $1D-3$  Earth mass)

# Debris disks around nearby stars

- Relevance of an astrometric mission:
  - Dynamical interactions between planets and disks: mass is mandatory
  - Planet formation (mass in the disk versus mass in the planets)