

# YSO/Exoplanet Interferometry

## - draft group think -

- **Structure of planet forming disks:** (Initial conditions, efficiency, migration - detection)
  - Req: imaging-uv, 0.5-23  $\mu\text{m}$ , 1.5 km, high dynamic range).
- **Exoplanet dynamics:** follow up known planets, astrometric search.
  - Req: 10 microarcsec astrometry, stars RV can't do, K=17
- **Masses/diameters of young stars:** (gravity, age).
- **Resolving planetary diameters/rings etc:** (rings, atmosphere).
- **Exoplanets mass, orbital radius, age:** photons, spec. of planets.
- **Structure of debris disks:** exozodi, dust composition, ast. Belts
  - High dynamic range, spectroscopic.
- **Accretion process/geometry (onto star):** .
- **Stellar B field structure & rotation:** spot rotation etc.
- Themes:
  - creation and evolution of planetary systems
  - Star formation and early stellar evolution
- **Instrument priorities (ordered)**
  - Imaging, H-N,  $10^4$ - $10^6$  dynamic range,  $\sim 0.05$  AU in Torus,  $\sim 20 \times 20$  pix