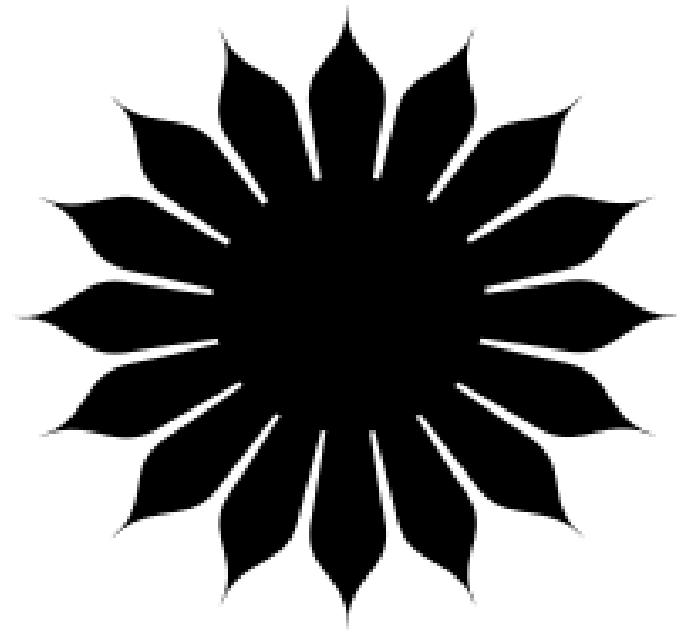**Team project #1**

*Space external occulter project*

Imaging and characterization (spectroscopy) of Earth-like planets with a non-coronagraphic telescope + external occulter

Design telescope + occulter: telescope diameter, occulter(s) size and distance
Observing scenarion, targets ?
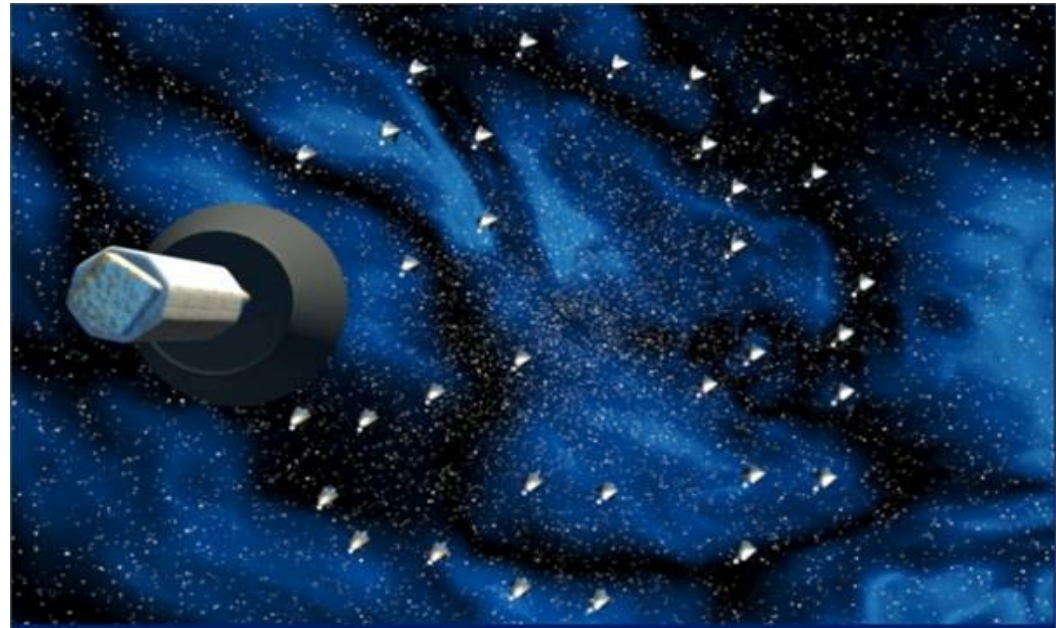Implementation challenges ?



Starshade example geometry

**Team project #2**

*Planet Surface imager*

*Large baseline space interferometer – each telescope equipped with a coronagraph to suppress starlight*

Science goals:

- Map exoplanet surfaces (ocean/ground/clouds)
- Derive physical characteristics (diameter, albedo)
- Identify life (vegetation ?)
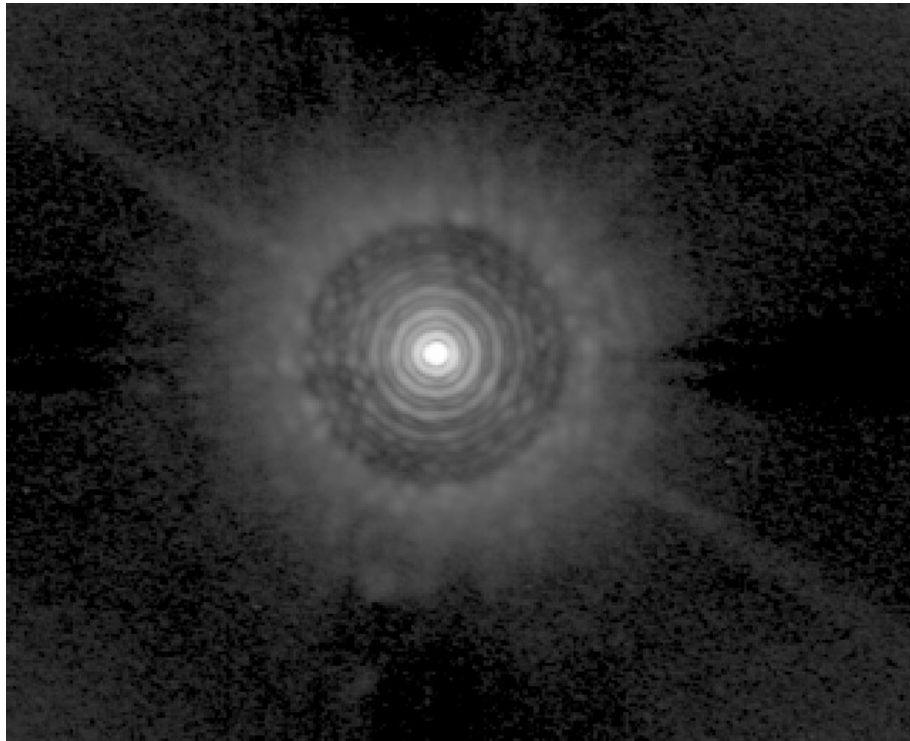
**Team project #3**

*Equip LBT with coronagraph*
*which coronagraph ?*
*Other system improvements, required subsystems ?*
*Can you take advantage of dual aperture ?*

Image giant planets in near-IR
Is it possible to see reflected light from some planets ?



LBT AO PSF