Day 2

Key Questions:

What are the gaps in SOFIA's capabilities to study the **Path to Life**, the **Birth of Planetary Systems**?

HD line at 112 μm to measure disk masses

High-resolution spectroscopy from ~30 to 115 μm for hydrides, Si II, water

Better mid-IR medium-resolution spectroscopy for ices and dust features

Considerations

- HD detections of nearby disks required hours with Herschel. How many disks can SOFIA detect? Can we detect extended HD emission from molecular cores/clouds?
- Imaging seems to be unimportant for disks…but interesting for ejecta.
- High-resolution spectroscopy and medium-resolution spectroscopy have very different scientific objectives.

Day 2

Key Questions:

What are the gaps in SOFIA's capabilities to study the **Birth and Death Planetary Systems**?

- Better ejecta monitoring and imaging
- Better far-IR high-resolution spectroscopic imaging
- Better polarization imaging
- Better broad-band SED monitoring

Considerations

- HD detections of nearby disks required hours with Herschel. How many disks can SOFIA detect? Can we detect extended HD emission from molecular cores/clouds?
- Imaging seems to be unimportant for disks…but interesting for ejecta.
- High-resolution spectroscopy and medium-resolution spectroscopy have very different scientific objectives.