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 $\mu$m to measure disk masses
- High-resolution spectroscopy from $\sim$30 to 115 $\mu$m 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.