ORIGINS Space Telescope

Potential Concept 2 Options

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Objective

- Maximize science capability within boundary conditions

So, what are the boundary conditions?

Options (for discussion)

- Change science scope and requirements
- Change aperture size
  - Bigger? (very expensive, surely a large LV), or
  - Smaller
- Spherical primary mirror, if it significantly reduces cost or risk?
- Fewer instruments?
- Fewer instrument operational modes?
- Telescope temperature a bit warmer?
  - Quickly lose sub-mm sensitivity if much warmer
- Cost target?

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Keep in mind

- Lessons from Concept 1 will be brought to bear when we study Concept 2
- Concept 1 cost is high relative to NASA funding wedge for the next large mission
- SPICA M5 mission concept is a “third” point in solution space – we know something about science capability and science per $ for a 2.5 m cryogenic far-IR telescope

The agenda allocates time for discussion of options, and process for deciding on the BCs.