

## Mid-Infrared Astronomy with the NGST

E. Serabyn, M. Barsony, M. Ressler, M. Werner (JPL), L. Armus, D. Shupe, C. Xu (IPAC), D. Backman (Franklin & Marshall), L. Ho (OCIW), D. Koerner (UPenn), E. van Dishoeck (Univ. Leiden), C.G. Wynn-Williams (U. Hawaii)

We present an overview of the science capabilities enabled by a mid-infrared camera/spectrometer on board the NGST. Even without full mid-IR optimization, a mid-infrared (5–30 microns) instrument on the NGST will be orders of magnitude more sensitive than any equivalent ground-based instrument/telescope combination. In the extragalactic arena, the mid-IR region is critical for a complete understanding of the high-redshift universe, dusty star-formation regions at low and high redshifts, and starburst vs. AGN discrimination. In the local universe, great strides forward can be made using mid-IR imaging, spectroscopy, and coronagraphy of dusty and rocky disks of all ages, from protostellar to remnant debris disks. Near-neighbor detection and characterization can also be greatly advanced by mid-infrared observations.

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