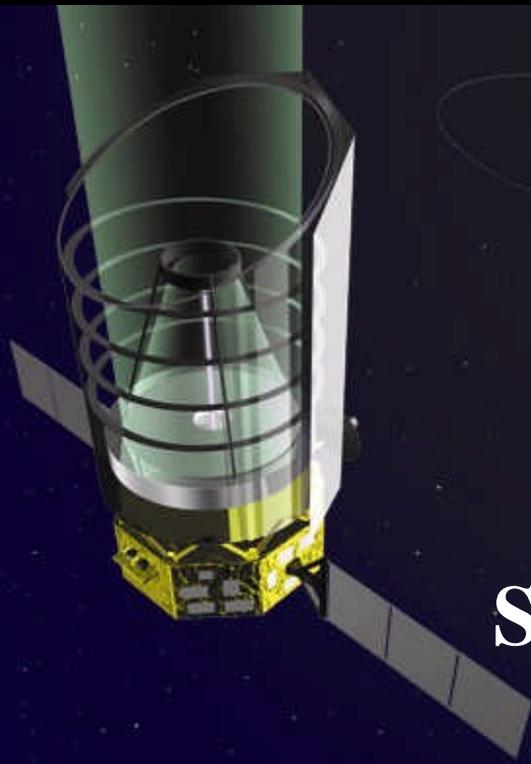


SPICA (aka HII/L2)

(Space Infrared Telescope for Cosmology and Astrophysics)



M. Tamura ^a

on behalf of

Prof. T. Matsumoto ^b

and T. Nakagawa ^b

SPICA Working Group ^{a,b,c,d,e}

^aNAOJ Mitaka, ^bISAS

^cNagoya University, ^dNASDA, ^eUniversity of Tokyo

SPICA MISSION: General Specification 1

- ✓ **Telescope**
 - ✓ **Aperture:** 3.5m C/SiC mirror
 - ✓ **Temperature:** 4.5K
 - ✓ Warm launch, cooled in space
 - ✓ Radiation cooling
 - ✓ Mechanical cooler (JT); $T(\text{FPI}) < 4.5\text{K}$
- ✓ **Sun-Earth L2 halo orbit, launched with H-IIA rocket (to carry the total ~2.6 ton mission)**

SPICA MISSION: General Specification 2

- ✓ **Observatory for mid- and far-infrared astronomy**
 - ✓ **Wavelength coverage: ~5-200 micron**
 - ✓ **High spatial resolution Imaging**
 - ✓ **Diffraction limit at 5 micron (0.36")**
 - ✓ **MIR coronagraph**
 - ✓ **High spectral resolution Spectroscopy**
- ✓ **Launch: ~2010**
- ✓ **Complementary mission to NGST (6-8m; 1-10 micron) and FIRST (3m; 85-900 micron)**

SPICA MISSION: Expected Sensitivity

