[7FF-05] SPICA Near-Infrared Instrument, FPC and its Science

Woong-Seob Jeong¹, Toshio Matsumoto^{2,3}, Dae-Hee Lee¹, Chang Hee Ree¹, Youngsik Park¹, Bongkon Moon¹, Sung-Joon Park¹, Jeonghyun Pyo¹, Wonyong Han¹, Hyung Mok Lee², Myungshin Im², Bon-Chul Koo², Masateru Ishiguro², Jonghak Woo², SPICA/FPC Team^{1,2,3,4}

¹Korea Astronomy and Space Science Institute, South Korea, ²Seoul National University, South Korea, ³ISAS/JAXA, Japan, ⁴NAOJ, Japan

The SPICA (SPace Infrared Telescope for Cosmology & Astrophysics) project is a next-generation astronomical mission optimized for mid- and far-infrared observation with a cryogenically cooled 3m-class telescope. Due to its high angular resolution and unprecedented sensitivity, SPICA will enable us to resolve many key issues from the star-formation history of the universe to the planetary formation.

As an international collaboration, KASI proposed the near-infrared instrument which is composed of two parts; (1) science observation with the capability of imaging and spectroscopy covering 0.7µm to 5µm (FPC-S) (2) fine guiding to stabilize and improve the attitude (FPC-G). Here, we present the current status of SPICA/FPC.