Japan Geoscience Union Meeting 2011 (May 22-27 2011 at Makuhari, Chiba, Japan) ©2011. Japan Geoscience Union. All Rights Reserved.



PPS020-30

Room:103

Time:May 24 18:15-18:30

## SPICA Coronagraph Instrument (SCI) and study of exoplanets

Keigo Enya<sup>1\*</sup>, the SCI team<sup>1</sup>

<sup>1</sup>Japan Aerospace Exploration Agency

We present Space Infrared telescope for Cosmology and Astrophysics (SPICA),

SPICA Coronagraph Instrument (SCI), and observation of exoplanets with them. SPICA is an international mission led by JAXA with contribution of ESA and others. The launch of SPICA is planned in 2018. SPICA will have 3m class telescope and whole of it will be cooled to 6K to realize high sensitivity and special resolution. In various scientific objective of SPICA, one of the most important target of SPICA is detail observation of exoplanets. SCI is a specially designed instrument for the high contrast observation of exoplanets. SCI is expected to provide unique data for the study of exoplanets, not only detection but a catalogue of spectrum of Jovian exoplanets. Monitor observation of transiting planets, imaging and spectroscopy of sircumstelar discs are also important target of SCI. Observation of diversity of exoplanets with SPICA is complementally with detail study of the solar system planets.

Keywords: SPICA, coronagraph, SCI, exoplanet, infrared, transit