

[ST16] AKARI (ASTRO-F) Survey of Extended Dust Shells around Evolved Stars

Hideyuki Izumiura¹, Issei Yamamura², Toshiya Ueta³, Osamu Hashimoto⁴, Mikako Matsuura¹, Masaaki Ohtsuka¹, Takashi Miyata⁵, Yoshikazu Nakada⁵, Yoshifusa Ita², Noriyuki Matsunaga⁵, Toshihiko Tanabe⁵, Hinako Fukushi⁵, Takashi Tsuji⁵, Takashi Onaka⁶, Kyung Sook Jeong⁷, Rens Waters⁸, Ryszard Szczerba⁹, Thibaut Le Bertre¹⁰

¹National Astronomical Observatory, NINS, JP, ²Institute of Space and Astronautical Science, JAXA, JP, ³Department of Physics and Astronomy, University of Denver, USA, ⁴Gunma Astronomical Observatory, JP, ⁵Institute of Astronomy, University of Tokyo, JP, ⁶School of Science, University of Tokyo, JP, ⁷Department of Physics and Astronomy, Seoul National University, KR, ⁸Astronomical Institute, University of Amsterdam, NL, ⁹Nicolaus Copernicus Astronomical Center, PL, ¹⁰Observatoire de Paris, FR

We introduce our survey of extended dust shells around evolved stars based on MLHES, a mission program (MP) for AKARI (ASTRO-F, a cooled infrared satellite with 69cm aperture) now underway, which aims to investigate the mass-loss behavior of low- and intermediate-mass stars at their latest stages of evolution by observing the structure of their extended dust shells with infrared emission from dust grains. MLHES will make maps of about 70 evolved stars of various types with FIS (Far-Infrared Surveyor) which provides images in four filter bands centered between 50 and 180um simultaneously.

[ST17] A Korea-Japan Extrasolar Planet Search Program

Bun'ei Sato¹, Hideyuki Izumiura¹, Michitoshi Yoshida¹, Eiji Kambe¹, Seiji Masuda¹, Eri Toyota², Seitaro Urakawa³, Inwoo Han⁴, Young Beom Joen⁴, Kang Min Kim⁴, Byeong Cheol Lee⁴, Tae Seog Yoon⁵

¹Okayama Astrophysical Observatory, NAOJ, NINS, Japan, ²Graduate School of Science and Technology, Kobe University, Japan, ³Japan Spaceguard Association, Japan, ⁴Korea Astronomy and Space Science Institute, ⁵Kyungpook National University

We report the current status of a Korea-Japan extrasolar planet search program using the 1.8m reflector at BOAO. The program aims to detect planets around intermediate-mass G-type giants by precise Doppler technique. To date (as of September 7) we have observed about 100 stars since 2005. We have found one star probably hosts a brown dwarf companion and a few stars show significant radial velocity variations. Future prospects of the program will also be discussed.