

Prevalence of exozodiacal dust

Wednesday July 15th, 2:00-4:00pm in lecture room 206

Abstract: When observing an extrasolar planetary system, the most luminous component after the star itself is generally the light scattered and/or thermally emitted by a population of micron-sized dust grains. These grains are expected to be continuously replenished by the collisions and evaporation of larger bodies just as in our solar zodiacal cloud. Exozodiacal clouds (“exozodis”) must therefore be seriously taken into account when attempting to directly image exoEarths. With this satellite meeting, we propose to discuss the progress made in the field since Pathways I (2009) and review the pathways to improve our knowledge on exozodis in regard of new observational results (completed near- and mid-infrared interferometric surveys, WISE, and Herschel) and new analyses on the impact of exozodis on the direct detection of exoEarths.

Program:

- 14:00 - 14:05: Introduction and summary of the 2009 meeting (Carlos Eiroa)
- 14:05 - 14:20: Impact of exozodi on Earth-like planet imaging telescopes (Aki Roberge)
- 14:20 - 14:35: Near-infrared exozodi survey results (Steve Ertel)
- 14:35 - 14:50: Mid-infrared survey results and prospects (William Danchi)
- 14:50 - 15:05: HZ dust measurements by a small coronagraph optical imaging mission (Karl Stapelfeldt)
- 15:05 - 15:20: Warm exo-Zodi from cool exo-Kuiper belts (Grant Kennedy)
- 15:20 - 15:30: Summary of hot dust workshop (Denis Defrère)
- 15:30 - 16:00: Discussions (led by Denis Defrère, Steve Ertel)