From Spitzer to Herschel and Beyond: The Future of Far-Infrared Space Astrophysics

June 7-10, 2004
Pasadena Convention Center, Pasadena CA, USA

The Conference ***From Spitzer to Herschel and Beyond: The Future of Far-Infrared Space Astrophysics*** will offer a scientific and technical forum to discuss the existing, anticipated, and potential contributions of Spitzer, Astro-F, Herschel, and future far-IR missions to modern astrophysics. The first results from the Spitzer Space Telescope will be in hand, and will be discussed in the context of planning observations with future facilities. The capabilities of far-IR / submillimeter space technologies for addressing the next generation of astrophysical questions will be examined. Check for updates at **http://safir.jpl.nasa.gov/BeyondSpitzerConf/**

Scientific and Technical Organizing Committee

Dominic Benford
Chas Beichman
Andrew Blain
Jamie Bock
Matt Bradford* (LOC chair)
Michael DiPirro
Jennifer Dooley
Mark Dragovan
Jackie Fischer
Ken Ganga*
Varoujan Gorijian*
Thijs de Graauw
Matt Griffin
Paul Harvey
Martin Harwit
George Helou*
Lynne Hillenbrand
Charles Lawrence
David Leisawitz
Dan Lester
Amy Mainzer
John Mather
Toshio Matsumoto
Gary Melnick
Robert Menzies*
Lee Mundy
Takao Nakagawa
John Pearson*
Tom Phillips*
Göran Pilbratt
Albrecht Poglitsch
George Rieke
Bernhard Schulz*
Peter Shirron
Gordon Stacey
Lisa Storrie-Lombardi
Mike Werner
Hal Yorke* (STOC Chair)
Jonas Zmuidzinas

* assisting with local organizing (LOC)

Topics to be covered:

- **Spitzer Space Telescope**
  - Description of mission and initial data
  - Scientific implications of first results
  - Ongoing Spitzer programs through the full mission lifetime
  - The Spitzer Science Center: support of Spitzer data analysis (DISPLAY)
- **Astro-F**
  - Observatory and instruments
  - Overview of planned science projects
- **Herschel**
  - Observatory and instruments
  - Overview of planned or potential science projects
  - The NHSC: support of Herschel opportunities (DISPLAY)
- **Far-IR / submm science topics beyond Spitzer and Herschel**
  - The solar system
  - Star and planet formation
  - The ISM of the Milky Way
  - The ISM of nearby and distant galaxies
  - Galaxies at redshift 1 and beyond
  - Population III star formation and the era of reionization
- **Technology for Far-Infrared Space Astrophysics**
  - Detectors: heritage and new technologies
  - Instrument architecture and focal-plane cooling
  - Telescopes, mirrors, & structures
  - Observatory thermal architecture & cryogenics
- **Far-IR missions beyond Spitzer and Herschel: scientific vision and technical capabilities**
  - SPICA
  - SAFIR
  - Interferometry missions: SPIRIT, ESPRIT, and SPECS

Images: M81 at 70 and 160 μm obtained with the Spitzer Space Telescope MIPS instrument: courtesy JPL-Caltech / K. Gordon (U of Arizona)