



# Splinter #4

## Calibration and cross-calibration strategies

Leiden, 3 December 2004

**S.J. Leeks/A.M. Heras**

HERSCHEL SPACE OBSERVATORY



# Introduction

- A number of key far-infrared and submillimetre facilities currently operating or available in the next future:
  - Ground observatories: JCMT, CSO, ALMA
  - Balloon flights: BLAST
  - Stratospheric observatory: SOFIA
  - Space observatories: SWAS, Spitzer, ASTRO-F, Herschel, Planck
- Legacy from previous missions:
  - IRAS, ISO

HERSCHEL SPACE OBSERVATORY



# Common calibration issues

- Calibration in the far-infrared/submillimetre is particularly challenging because of our limited knowledge in this spectral range.
- In spite of different instrument characteristics, many calibration issues may be common:
  - Calibration sources
  - Calibration preparatory programs
  - Strategies for flux and wavelength calibration
  - Spatial calibration (beam profiles, apertures)
  - Background determination
  - Balance between on the ground and in-orbit instrument characterization
  - Detector characterization



# Objectives of the splinter

- To share calibration knowledge and experience in the far-infrared/submm
- To identify problematic areas
- To discuss how we can help each other: Preparatory programs, exchange of information and data, contact persons...
- To devise a strategy for cross-calibration

HERSCHEL SPACE OBSERVATORY