Debris disks are composed of dust grains and planetesimals around main-sequence stars. The dust population is replenished by colliding planetesimals which were formed in the protoplanetary disk. The Herschel DEBRIS (Disk Emission via Bias-free Reconnaissance in the Infrared/Submillimetre) survey is a flux-limited survey of 446 nearby main-sequence stars designed to detect and characterize debris disks. It is unbiased to spectral type, age, metallicity, binarity and presence of known planets. Herschel’s observing wavelengths and sensitivity promise to increase the number of known debris disk hosts. Its resolving power offers the ability to learn more on the structure of disks, as they have sizes on the scales of 10-1000 AU.

The spatial information is of key interest because the observed spectral energy distribution (SED) of the dust has degeneracies between the grain properties and the disk size. Disk radii estimated from SEDs have been found to generally underestimate the radii determined from imaging. The multi-wavelength imaging also samples different grain populations at each wavelength. (Cooler grains dominate more at longer wavelengths.) Finally, determining the spatial distribution of dust grains can point towards the location of the parent planetesimal population.

We present resolved maps and surface brightness distributions at 100 and 160 \( \mu \)m (using PACS) showing the extended emission due to the disk. Observations at 250, 350 and 500 \( \mu \)m (using SPIRE) detect the submillimetre emission from this disk for the first time. We show the 250 \( \mu \)m map which is heavily populated by extragalactic background sources.

**ABSTRACT**

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