The FIR/submm end far-ultraviolet emissions of galaxies: The FIRST and GALEX surveys

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The comparison of the far infrared and far ultraviolet emissions of galaxies in the local universe has demonstrated that

- these two emissions are very complementary star formation tracers
- the ratio of the FIR to FUV emission is a very powerful and robust tracer of the dust extinction within star forming galaxies.

GALEX is a UV satellite which will observe in the far-uv and near-uv both in imagery and spectroscopy. Its launch is scheduled in 2002. The cross-correlation between the PACS and SPIRE surveys and the GALEX survey will extend the very preliminary work already made with IRAS and FOCA (balloon borne UV experiment) data.

In this poster we will discuss the characteristics of the cross-correlated samples given the limiting magnitudes expected with GALEX and FIRST such as selection biases, number of objects, redshift distribution...

We will also present the scientific topics which can be addressed with such data