

Presentation Title:

SWIRE: The SIRTf Wide-Area Infrared Extragalactic Survey

Presentation Relevance:

SWIRE is the largest of the SIRTf legacy proposals, and is designed with the aim of studying galaxy and AGN evolution in several well-studied high galactic latitude fields. It would be highly desirable if the ACS High-Latitude Survey coincided with one of these fields to provide a database of matched observations over such a wide span in wavelength.

Presentation Abstract:

SWIRE (the SIRTf Wide-Area Infrared Extragalactic Survey) is wide-area, high galactic latitude, imaging survey to trace the evolution of dusty, star-forming galaxies, evolved stellar populations, and active galactic nuclei as a functioning environment from $z \sim 3$ to the present epoch. SWIRE will survey approximately 70 square degrees with MIPS and IRAC at wavelengths from 3.5 to 160 microns using 850 hours of SIRTf's first two years in operation, and is the largest of the SIRTf Legacy projects. These 70 square degrees will be broken up into 7 survey areas, most of which are already the sites of ongoing survey work at other wavelengths (e.g. Lockman Hole, AXAF-S, ELAIS N, etc). The SIRTf data, as well as other ancillary data being collected as part of the project, will be released to the public on a (6 month) timescales. A high-latitude survey with ACS of part (roughly 1 square degree) of one of our target fields would greatly enhance the scientific return of both projects by allowing detailed comparisons to high spatial-resolution optical images. We emphasize the IR-selection of our survey areas which make them the most amenable to study all wavelengths, as opposed to other large area surveys selected at different wavelengths.