

ABSTRACT

CHRYSOSTOMOU, Antonio

Joint Astronomy Centre, Hilo

Surveys of the submillimetre sky with SCUBA-2

SCUBA-2 is a state-of-the-art submillimetre camera currently being commissioned on the James Clerk Maxwell Telescope (JCMT). It offers simultaneous wide-field (50 sq arcmin) imaging at two wavelengths (450 and 850 microns) and is expected to map the submillimetre sky some hundreds of times faster than SCUBA. Equipped with this revolutionary instrument, observations for the JCMT Legacy Survey (JLS) will commence in 2011. The JLS comprises 7 individual surveys, ranging from nearby debris discs through Galactic star formation to nearby galaxies and deep cosmological fields. As a focal plane array on a large single-dish telescope, SCUBA-2 will be complementary to both Herschel and ALMA. I will discuss the status of the instrument and will present the scientific goals of the JLS surveys.