ORAL SESSION n°2

« Direct detection »

Wednesday 10 May 16:00-17:55

Chaired by:

Dr. Gregory Goltsman & Dr. Anders Skalare

Transition Edge Superconducting detector arrays for a 40-200 μm spectrometer on the SPICA telescope

Philip Mauskopf,
University of Wales, Cardiff, UK

Invited paper

We present the detector requirements for a spectrometer instrument designed to cover the 40-200 um wavelength range from a cooled space-borne telescope such as the proposed Japanese SPICA mission.
We discuss possible solutions using transition edge superconducting (TES) bolometers for achieving the required detector sensitivity, speed, dynamic range and number of pixels within the constraints of a space-borne platform.