

**ID 341**

**Tipo de Comunicación:** Poster

**Sesión Científica:** Galaxias y cosmología

**Título:** Characterisation of candidate ultra-bright sub-mm galaxies selected from VHS/WISE

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**Resumen:**

Bright submillimetre galaxies at high redshifts appear to be forming stars at very high rates (1000 /yr). These dust-obscured galaxies in the nIR are very luminous at submillimetre wavelengths with star-forming regions 100 x larger and 106 times more luminous than in normal galaxies. Using as reference the near and mid- IR colours of the lensed sub-mm galaxy SMMJ2135-0102 ( $z=2.3259$ ,  $K=18$ ,  $J-K=2.5$ ,  $W1-W3=3.3$ ) we carried out a search for brighter analogues of similar colours using VISTA/VHS and WISE over a region of more than 6230 sq. deg.

For selected brightest candidates ( $K < 18$ ) detected in this search it has been requested time to make observations sub-mm, millimeter, optical and near IR (LABOCA / APEX, ALMA, VLT / X-shooter and GTC / OSIRIS). This is to measure their redshifts (expected in the range  $z = 1-2.5$ ) and determine the properties and evolution of the characteristics of the dust.