X06a   Finding gravitational lenses among half a million Herschel sources

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Observations of large samples of Herschel-selected lensed SMGs can provide a unique probe of the intervening Universe and its cosmology. However, increasing the sample of the gravitational lenses still remains a challenge as our current selection methods are only based on relatively-crude flux cuts. Here, we show that optical and near-infrared imaging are an essential tool for identifying the gravitational lenses within the Herschel samples by finding the foreground lensing galaxies. We improve our method to near 100% accuracy, contrary previous work ($\sim$40%). Based on near-IR VIKING data, we will present the first measure of the lensing probability as a function of selection flux. We will then outline our ongoing work with ALMA in combination with multi-wavelength imaging to target confirmed lensed sources, and conversely, to target unlensed sources - the most intensely starforming systems in the known Universe.