## Terrestrial Parallax in the Low-mass Event MOA-2011-BLG-274 and a Preliminary Search for Low-mass Objects in the Database of the WISE Space Mission

Mr. Matthew Freeman

mfre070@aucklanduni.ac.nz
University of Auckland

Abstract: Evidence for unbound low-mass lenses was reported by the MOA and OGLE groups from statistical analyses of their 2006 and 2007 databases (Taka Sumi et al, Nature 473, 349, 2011). Individually, none of these events permitted measurements of the distances or the masses of the lenses. Observation of the source-size and terrestrial parallax effects would permit distances and masses to be measured. This could be feasible in short events of high magnification. Here we report a preliminary attempt to observe these effects in the event MOA-2011-BLG-274 for which tE and Amax were approximately 3 days and 200 respectively. Evidence from the WISE space mission was also reported recently for very cool Y-dwarfs (Michael Cushing et al, ApJ 743:50, 2011). Here we describe a preliminary search for candidate low-mass objects amongst the publicly released database for this mission.