

Abstract Submitted
for the NWS10 Meeting of
The American Physical Society

Stellar Mass Functions using OGLE and MOA Gravitational Microlensing Events DIANE FEUILLET, Whitman College, KAILASH SAHU, STScI — Gravitational microlensing is an astronomical phenomenon that can be extremely useful in finding a variety of information, ranging from determining mass of the lens to detecting extra solar planets and black holes. The OGLE and MOA groups provide a catalogue of more than 5000 microlensing events observed in the direction of the Galactic bulge over the past ten years. The duration of the event can be used to get a statistical estimate of the mass of the lens. This information was used to derive the present-day mass function of the lenses, which include stars and stellar remnants, in the direction of the Galactic bulge. One can then compare this mass function with the accepted initial mass function of the Galaxy. Compared to the initial mass function, we found a slight excess of high mass objects in the Galactic bulge from the microlensing events.

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Date submitted: 18 Aug 2010

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