The Mass Spectrum Of Machos From Parallax Measurements

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We demonstrate that by making satellite-based parallax measurements of Macho events, it is possible to distinguish disk from bulge Machos and to determine individual masses of disk Machos to an accuracy of \$0.2\$ in the log. This is at least a 3-fold improvement over what can be done without parallaxes, i.e., just from the observed time scale of the events. In addition, we show that the physical distribution of disk Machos can be found from 'reduced' velocities determined by parallax measurements.