Automatic Real-time Modeling of Microlensing Events

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Abstract: We present a computer program that performs fast fully automatic modeling of microlensing events through a wide search in the parameter space driven by identification and classification of features in the light curve. Compression of data, downhill fitting and efficient light curve calculation ensure that the duration of each modeling run is contained within 2 hours. We illustrate the performance of this system in the 2011 microlensing season, discussing possible upgrades for the 2012 season.