

Microlensing Binaries Discovered through a High-Magnification Channel

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Abstract: Microlensing can provide a useful tool to probe binary distributions down to low-mass and even substellar binary companions. With the strategy of focusing on high-magnification events, a significant fraction of binary lens events are detected through this channel. In this talk, we present the analyses of light curves of 8 binary lensing events detected through the channel of high-magnification events during the seasons from 2007 to 2010. These events include MOA-2007-BLG-146, MOA-2008-BLG-159, OGLE-2008-BLG-510/MOA-2008-BLG-369, MOA-2009-BLG-408, MOA-2010-BLG-266, MOA-2010-BLG-349, MOA-2010-BLG-406, and MOA-2010-BLG-546. We point out that the close/wide degeneracy is an important obstacle for the study of binary statistics using microlensing binary samples.