KMI-Colloquium

New Results on Microlensing Search of Compact Dark Matter



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Abstract:

Microlensing observations have been used to constrain the abundance of compact dark matter including Primordial Black Holes (PBHs). Recently PBH dark matter scenario attracts a lot of attention due to discoveries of binary black holes by Advanced LIGO gravitational wave observations, which suggest that black holes are ubiquitous in the Universe. I will review recent progress on microlensing search of compact dark matter, including efforts for extending the range of mass scales probed by microlensing as well as surprising discoveries of ultra high magnification microlensing events which

enable us to detect individual stars at the cosmological distance.



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