Detached Binaries in the Large Magellanic Cloud

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Analysis of the radial-velocity and light curves of detached eclipsing binaries allows to derive stellar masses and radii and, in consequence, enables to find their distances. The method has been already applied to several LMC binaries, but in order to have the distance to the LMC determined with good accuracy, the parameters need to be known for a larger number of systems. As a first step we present results of the analysis of the photometry of over eighty detached binaries in the LMC selected from the OGLE-II catalog of 53 000 variable star candidates. If possible, we combine the OGLE-II data with the photometry from other projects (MACHO and EROS). As a result, we present the list of brightest eclipsing binaries in the LMC suitable for distance determination.