

A SYNOPTIC VIEW OF THE MAGELLANIC CLOUDS:
VMC, GAIA AND BEYOND

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OGLE-ing the Magellanic System

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The Optical Gravitational Lensing Experiment (OGLE) has been monitoring the Magellanic System area for more than 20 years using 1.3-meter Warsaw Telescope located at Las Campanas Observatory in Chile. Since 2010 the project has been observing a vast area on the sky, currently covering more than 700 square degrees in the Magellanic System. 544 OGLE Magellanic fields are being observed using two passbands, I and V, and completely cover the Magellanic Bridge region as well as very broad areas containing LMC and SMC halos. This makes the OGLE database perfect for studying the Magellanic System properties in details. I will present results of a subproject entitled "OGLE-ing the Magellanic System". We used 9000 classical Cepheids and 23000 RR Lyrae stars from the almost complete OGLE Collection of Variable Stars to study the three-dimensional structure of both Magellanic Clouds. We also analyzed distribution of classical and anomalous Cepheids as well as RR Lyrae stars in the Magellanic Bridge area. We show that young stars form a bridge-like connection between the Clouds, while old are more spread and resemble two extended overlapping structures.