

[S02-1] Research Activity on Microlensing in Korea

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We introduce two new microlensing experiments in which Korean researchers are actively participating: Micro-FUN (Microlensing Follow-Up Network) and Angstrom (The Andromeda Galaxy Substellar Robotic Microlensing Experiment). The Micro-FUN is an international collaboration of USA, Korea, Israel, and New Zealand. The aim of this experiment is detecting signals of extra-solar planets on lensing light curves and other anomalies that can help to better characterize lens parameters by intensively monitoring events detected in survey experiments toward the Galactic bulge field. The Angstrom project is also an international project with three participating countries of UK, Korea, and USA and it aims to detect microlensing events toward the Andromeda galaxy by using three 2m-class telescopes including 1.8m one in Bohyunsan Observatory. We briefly describe the first-year result of the Micro-FUN project and progress report of the Angstrom project.

[S02-2] Alpha-element Abundances in 9 Old Halo Globular Clusters

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We present elemental abundance ratios for red giant stars in 9 old halo globular clusters based on the homogeneous data sample and analysis method. Our result suggests that [Si/Ti] ratios in old globular clusters decrease with Galactocentric distances, confirming the previous result by Lee & Carney (2001). We propose that contributions from different masses of the Type II supernovae progenitors that enriched proto-globular clusters' clouds are responsible for this gradient.