

Hirao, Yuki  
Modeling Planetary and Binary Microlensing Events

By fitting the light curve of microlensing event, we can measure the planet/host mass ratio and their separation. As a graduate student of MOA group, I have worked on the analysis of two planetary microlensing events and estimated their properties. I am also working on the real time modeling of the ongoing microlensing events. This is useful for the follow-up observations and for the future statistical studies. At the same time, I am working on the new wide field-of-view near Infrared camera for PRIME telescope. Four 4k×4k pixels H4RG-10 detectors will be used for the camera and it will be cooled down to 80-100K. I am currently working on the thermal and mechanical design of this new camera.