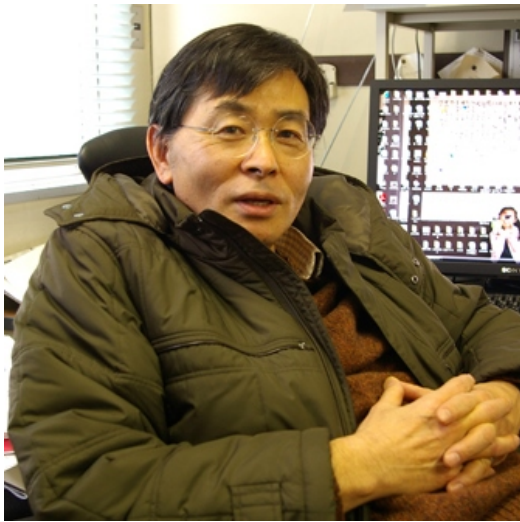


# KMI Colloquium

## *Weak Lensing Study of Subhalos in very nearby Galaxy Cluster*



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Wednesday, 25th May, 17:00-  
KMI Science Symposia (ES635)

### Abstract:

The structure we observe today is believed to be the result of hierarchical clustering of smaller CDM halos through the expansion of the universe. Although the scenario has been very successful in explaining the observed large scale structure of the universe, there is almost no observational evidence to test it on the Mpc scale where mass assembly history becomes important. This unclear situation will be resolved by the direct observation of cluster subhalo properties such as mass function and spatial distribution since they are directly compared with the result of N-body simulation. Furthermore, the correlation between the observed subhalo and galaxy properties gives us important information on the physics of galaxy evolution associated with dark matter. For this purpose we have been observing DM subhalos by weak lensing in very nearby galaxy clusters. Here I will talk on our project and the present status as well as some results starting from a brief introduction of weak lensing.

