

## **Reconstruction of large-scale CMB temperature anisotropies with primordial CMB induced in galaxy cluster**

*Monday 10 September 2018 15:10 (20 minutes)*

Scattering of cosmic microwave background radiation in galaxy clusters induces polarization signals determined by the quadrupole anisotropy in the photon distribution at the location of clusters. This remote quadrupole derived from the measurements of the induced polarization in galaxy clusters provides the information of local CMB temperature anisotropies. Here we present an algorithm of the reconstruction of large-scale CMB temperature map and conclude that the reconstruction can be good enough to be a consistency test on the puzzles of CMB anomaly, especially for the low quadrupole and axis of evil problems reported in WMAP and Planck data.

**Author:** LIU, Guo Chin (Tamkang University)

**Co-authors:** ICHIKI, Kiyomoto (Kobayashi-Maskawa Institute for the Origin of Particles and the Universe, Nagoya University); TASHIRO, Hiroyuki (Department of Physics, Graduate School of Science, Nagoya University); SUGIYAMA, Naoshi (Kobayashi-Maskawa Institute for the Origin of Particles and the Universe, Nagoya University)

**Presenter:** LIU, Guo Chin (Tamkang University)