Contribution ID: **246** Type: **Oral**

Gamma-ray and optical polarimetric monitoring of GeV bright blazars

Tuesday 8 August 2017 16:00 (15 minutes)

Blazars are thought to possess a relativistic jet that is pointing toward the direction of the Earth and the effect of relativistic beaming enhances its apparent brightness. Although numerous measurements have been performed, the mechanisms behind jet variability, creation, and composition are still debated.

We performed simultaneous gamma-ray and optical photopolarimetry observations
of 45 blazars with Fermi/LAT and Kanata telescope between 2008 July and 2014 December to investigate the mechanisms of variability and search for a basic relation between the several subclasses of blazars. Consequently, we found that a correlation between the gamma-ray and optical flux might be related to gamma-ray luminosity and the maximum polarization degree might be related to gamma-ray luminosity or the ratio of gamma-ray to optical flux. These results imply that low gamma-ray luminosity blazars emit from multiple regions.

Author: Dr ITOH, Ryosuke (Tokyo Institute of technology)

Co-authors: Prof. FUKAZAWA, Yasushi (Hiroshima University); Dr UEMURA, Makoto (Hiroshima University); Dr TANAKA, Yasuyuki (Hiroshima University)

Presenter: Dr ITOH, Ryosuke (Tokyo Institute of technology)

Session Classification: Gamma rays

Track Classification: Gamma rays