

A14a      **Fermi-LAT and multi-wavelength observation of new TeV-emitting blazar S4 0954+65 during bright optical flare in 2015 February**

Yasuyuki T. Tanaka, Ryosuke Itoh, Kensei Shiki, Yasushi Fukazawa (Hiroshima University), Yoshiyuki Inoue (ISAS/JAXA), Josefa Becerra Gonzalez, Roopesh Ojha (NASA/GSFC), Justin Finke (NRL)

We report on *Fermi* Large Area Telescope (LAT) and multi-wavelength results of the new TeV-emitting blazar S4 0954+65 ( $z=0.368$ ) during an extraordinary bright optical flare in 2015 February. Compared to 4-year averaged (3FGL) LAT spectrum of  $\Gamma_{\text{GeV}} = 2.38 \pm 0.04$ , the daily MeV/GeV spectrum showed significant hardening in a few days during the high state and the hardest power-law index of  $\Gamma_{\text{GeV}} = 1.8 \pm 0.1$ . On the same day, very-high-energy ( $E > 100$  GeV)  $\gamma$ -ray emission was detected by ground-based Imaging Atmospheric Cherenkov Telescope, MAGIC (Mirzoyan et al., ATel 7080), suggesting that blazars which showed hardening of  $\Gamma_{\text{GeV}} \lesssim 2.0$  in MeV/GeV band is a promising target for TeV follow-up. *Swift*/XRT data showed softer spectrum of  $\Gamma_x = 1.72 \pm 0.14$  during the MAGIC detection night, while hard spectra (typically  $\Gamma_x = 1.3 - 1.4$ ) was observed on the other days during the flaring state. Modeling of quasi-simultaneous ( $< 1$  day) broadband spectrum based on one-zone synchrotron plus inverse-Compton assumption revealed that GeV/TeV emission would be produced by inverse-Compton process of external photons coming from dusty torus, rather than Synchrotron self-Compton radiation, despite the BL Lac type classification. We also discuss future perspective of CTA follow-up for GeV-flaring blazars detected by Fermi-LAT.