Contribution ID: **205** Type: **Talk**

Multi-wavelength observations on the gamma-ray periodic blazar PG1553+113

Sunday 6 December 2015 18:15 (20 minutes)

PG 1553+113 is a blazar with an uncertain redshift detected at very high energies (VHE; E > 100 GeV) both during high and quiescent flux states. The Fermi/LAT collaboration
recently reported the detection of a ˜2-year modulation of the integral flux emitted in both optical and high-energy (HE) gamma rays(Stamerra et al. at this conference). Interestingly, one of the physical scenarios that can account for such variability pattern is the presence of a supermassive black hole binary in the nucleus of PG 1553+113. The MAGIC telescopes have observed PG 1553+113 at VHE since 2005. An intense multi-wavelength campaign aimed at unbiased monitoring of the source activity, from radio to VHE gamma rays, started in 2015. Here we will show the multiwavelength data going back almost a decade, from radio to VHE, along with the results from the ongoing observations.

Author: HUGHES, Gareth (ETH Zurich)

Co-authors: Dr SANDRINELLI, Angela (Università degli Studi dell'Insubria); STAMERRA, Antonio (INAF-OATo / SNS-Pisa); Dr FERRIGNO, Carlo (ISDC data center for astrophysics); GASPARRINI, Dario (ASDC/ INFN Perugia); LINDFORS, Elina (University of Turku); PRANDINI, Elisa (University of Geneva); LONGO, Francesco; BECERRA GONZALEZ, Josefa (NASA GSFC); Dr NIEVAS, Miguel (Complutense University of Madrid); Dr DA VELA, Paolo (INFN Pisa); DESIANTE, Rachele (Università di Udine and INFN); CUTINI, Sara (ASI Science Data Center - INFN); PAIANO, Simone (Univ. + INFN); CIPRINI, Stefano (INFN & University Perugia); COVINO, Stefano (INAF / Brera); BARRES, Ulisses (Centro Brasileiro de Pesquisas Físicas)

Presenter: HUGHES, Gareth (ETH Zurich)

Session Classification: 19 - VHE & CR