



*I N T E G R A L*  
SCIENCE DATA CENTRE

Centre attaché à l'Observatoire de Genève



**UNIVERSITÉ  
DE GENÈVE**

FACULTÉ DES SCIENCES  
Département d'astronomie

## ASTROPHYSICS SEMINAR



Thursday, 10 January 2008 at 11:00

# MAGIC view of PG 1553+113

**Daniela Dorner**

Julius-Maximilian-Universität Würzburg

**Abstract.** With the current generation of Cherenkov telescopes the number of sources discovered in the very high energy (VHE,  $> 50$  GeV) range has increased to 75. From the 20 active galactic nuclei (AGN) detected so far, studies on the physics in these objects can be carried out. This presentation focusses on the Blazar PG 1553+113, which has been observed for about 80 hours with the Major Atmospheric Gamma-ray Imaging Cherenkov (MAGIC) telescope between April 2005 and April 2007. The data of 2005 up to April 2006 have been re-analysed with an improved analysis taking the arrival times of the signals into account. The result from this is presented together with results of data from April 2006 to April 2007. The data of 2007 include a better timing resolution, due to faster FADCs, providing a better sensitivity of the measurement. In July 2006 data have been taken during a multi-wavelength (MWL) campaign. For the MAGIC data of these campaign a method to correct for strong atmospheric absorption has been developed, as this data suffer from the effect of the Saharan Air Layer. Applying this correction, the results can be used for a MWL study together with the data of the X-ray satellite Suzaku and the optical telescope KVA. The results of the study of flux and spectral variability between 2005 and 2007 are presented.

---

### Additional Information

---

The seminars are given in the ISDC "Pavillon" building  
Address: INTEGRAL Science Data Centre, ch. d'Écogia 16, CH-1290 Versoix  
WWW: ISDC Seminars: <http://isdc.unige.ch/?Science+seminars>