

## **OBSERVATION OF THE CRAB NEBULA WITH THE HEGRA SYSTEM OF IACTS USING AN ADVANCED TOPOLOGICAL TRIGGER MODE**

F. Lucarelli (1,2), A. Kohnle (1), A. Konopelko (1), H. Lampeitl (1) and W. Hofmann (1)

(1) Max-Planck-Institut für Kernphysik, Heidelberg, D-69117 Germany,

(2) Facultad de Ciencias Fisicas, Universidad "Complutense", Madrid, 28049 Spain.

lucarel@mickey.mpi-hd.mpg.de

The HEGRA system of imaging atmospheric Cherenkov telescopes (IACTs) has an energy threshold of about 500 GeV. We have made observations of the Crab Nebula for a total of about 8 hrs using the topological system trigger which allows to reduce the trigger threshold. The expected detection rates of cosmic rays and  $\gamma$ -rays as well as the energy threshold were calculated using the Monte Carlo simulations. The results of the analysis will be presented.