

## OBSERVATIONS OF THE MONOCEROS SNR/ROSETTE NEBULA INTERACTING REGION WITH THE HEGRA SYSTEM OF IACTS

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The array of 5 imaging atmospheric Čerenkov telescopes (IACTs) deployed at La Palma of Canary Island, and operated by the HEGRA (High Energy Gamma Ray Astronomy) collaboration, was used for the observations of the interaction region of the Monoceros SNR with the dense Rosette nebula for a total of about 100 hrs and 20 hrs in ON-source and OFF-source mode, respectively. At present the performance of the IACTs array reveals the energy threshold of 500 GeV and the angular resolution of  $0.1^\circ$  for  $\gamma$ -rays. By means of the HEGRA IACTs large field of view, we have mapped the extended sky region of  $2^\circ \times 2^\circ$  associated with the Monoceros SNR/Rosette nebula and which is centered towards the hard spectrum X-ray point source SAX J0635+533. The EGRET unidentified source of diffuse emission (3EG J0634+0521), in the energy range between 100 MeV - 10 GeV, was effectively in the field of view of our present observations. Based on the Monte Carlo simulations and real data we have studied the response of the IACTs array over its  $5 \cdot 10^{-3}$  str field of view with respect to the cosmic rays and diffuse  $\gamma$ -ray emission. We concluded almost constant array's sensitivity to the  $\gamma$ -ray fluxes (with the variation of  $\leq 10\%$ ) within the angular distance of 1 deg from the joint optical axis of the telescopes' array after the analysis by mean scaled Width.

The results of the data analysis and its physical interpretation will be presented at the conference.