VHE γ RAYS FROM CRAB AND GEMINGA PULSARS

P.R.Vishwanath, B.S.Acharya, P.N.Bhat, V.R.Chitnis, P.Majumdar, M.A.Rahman and B.B.Singh
Tata Institute of Fundamental Research, Homi Bhabha Road, Colaba, Mumbai 400 005, India..
vishwa@tifr.res.in/Fax: 091-22-215 2110

It has been known for some time that the pulsar spectra have to steepen at $\geq$ 100 GeV. This conclusion has been strengthened by the recent upper limits set by the imaging telescopes. However, the picture at energies of $\geq$ 1 TeV is not clear since there have been experiments from the past with detection at these energies. The recent versions of the Outer Gap Model predict a second component surfacing at these energies. The data taken with the PACT on Crab and Geminga have been looked at for possibilities of this emission. The preliminary analysis of the Crab pulsar data show the Main pulse region having larger Cerenkov light (measured in ADC counts) compared to the other phase regions, which is a signature for gamma ray emission. Rejection criteria based on lateral distribution which place the events in the higher energy region have shown moderate emission from the pulsar. The results of the final analysis with pulsar phasograms of both Crab and Geminga will be presented.