SELECTION OF TEV $\gamma$-RAYS USING THE KERNEL MULTIVARIATE TECHNIQUE

S. Dunlea (1), P. Moriarty (2) and D. J. Fegan (1)
(1) Department of Experimental Physics, University College Dublin, Belfield, Dublin 4, Ireland, (2) School of Science, Galway-Mayo Institute of Technology, Dublin Road, Galway, Ireland.
shane@ferdia.ucd.ie

The kernel multivariate analysis technique is optimised to select $\gamma$-ray events from on/off observations of the Crab Nebula recorded by the Whipple 10 m Imaging Atmospheric Čerenkov Telescope in January and February 2000. Results are compared with the conventional Supercuts analysis. A method to estimate the energy of $\gamma$-ray primaries is examined, and a TeV spectrum of the Crab Nebula extracted on this basis. The technique is then applied to on/off data taken on Markarian 421 during spring of 2000.