

SEARCH FOR VHE GAMMA-RAY EMISSION OF SELECTED BL LAC OBJECTS WITH THE CAT TELESCOPE

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Abstract

We report here results on the search for γ -ray emission above 250 GeV from selected BL Lac objects with the CAT atmospheric Cherenkov imaging telescope. The sources were chosen for their emission properties at lower energies, with a synchrotron peak located in the hard X-ray energy band, as well as for their extreme variability and their small redshifts; they were observed mostly in 1998 and 1999 with exposure times ranging between 10 and 20 hours. Upper limits on their VHE emission are derived by using the analysis method validated on the Crab nebula and Markarian 501.