

Detection of new Extreme BL Lac objects with H.E.S.S. and SWIFT

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Extreme high synchrotron peaked blazars (EHBLs) are amongst the most powerful accelerators found in nature. Usually the synchrotron peak frequency of an EHBL is above 10^{17} Hz, i.e., lies in the range of medium to hard X-rays making them ideal sources to study particle acceleration and radiative processes. EHBL objects are commonly observed at energies beyond several TeV, making them powerful probes of gamma-ray absorption in the intergalactic medium. During the last decade, several attempts have been made to increase the number of EHBL detected at TeV energies and probe their spectral characteristics.

Here we report new detections of EHBLs in the TeV energy regime, each at a redshift of less than 0.25, by the High Energy Stereoscopic System (H.E.S.S.). Also, we report on X-ray observations of these EHBLs candidates with *Swift* XRT. In conjunction with the very high energy observations, this allows us to probe the radiation mechanisms and the underlying particle acceleration processes.

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