

What is this contribution about?

Characterize a list of Extreme High Synchrotron Peaked (EHSP) blazar candidates from the Fermi-LAT BCU list by performing a multi-wavelength modeling of the SED and checking the prospects for Very-High-Energy (VHE) observations of them.

Why is it relevant / interesting?

After more than 10 years of operations, the list of unclassified Fermi-LAT blazar candidates still is a significant fraction of the total population of blazars and the number of extreme blazars detected by Fermi-LAT is limited.

What have we done?

Look for promising BCUs in the last 4LAC-DR2 that appear in the list of High Synchrotron Peaked (HSP) sources of the 2BIGB catalog, look for their redshifts and multi-wavelength counterparts and perform a SED modeling of the 23 best candidates.

What is the result?

We found 16 promising EHSP, some of them with possible emission in the VHE band and a few with hints of thermal components in their optical and IR spectra.