The HAWC AGN survey: four years of data

ALBERTO CARRAMIÑANA, INAOE, ISRAEL MARTINEZ-CASTELLANOS, University of Maryland, College Park, HAWC COLLABORATION — Active galactic nuclei are prolific sources of GeV gamma rays bound to play a preponderant role as extragalactic particle accelerators. Their study at TeV energies is limited to the nearby Universe due to the interaction of high energy photons with infrared extragalactic background light. The HAWC gamma-ray observatory, an extensive air shower array located at 4100m in central Mexico, has surveyed 2/3 of the sky at TeV energies since early 2015, with enough sensitivity to detect the Crab Nebula in single transits. HAWC upper-limits on TeV long-term emission from AGN constrain the extrapolation of the Fermi-LAT measurements for a number of AGN. An update on the HAWC follow-up study of a redshift limited sample of AGN drawn for the Fermi-LAT 3FHL catalog will be given.

1https://www.hawc-observatory.org/support/