H.E.S.S. detection and multiwavelength study of the z ~ 1 blazar PKS 0346-27

Friday 4 October 2024 13:45 (15 minutes)

We report the detection of a TeV blazar PKS 0346-27 at redshift 0.99 by the High Energy Stereoscopic System (H.E.S.S.) on 3rd November, 2021 with a significance above 5 σ . The spectral energy distribution (SED) consists of the simultaneous observations by Fermi-LAT, Swift XRT and UVOT during the H.E.S.S detection period. We show that a hadronic one-zone model (modified by strong EBL absorption) can provide a satisfactory fit to the data. The lightcurve consists of the multiwavelength data for all the observation periods and we were able to test some time lag between the GeV and TeV bands.

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Session Classification: AGN IV

Track Classification: Active Galactic Nuclei