



Figure 1: (Left) The preliminary significance measured from each of the 49 non-detected candidates using standard analysis cuts. The curve shows a Gaussian distribution, with mean zero and standard deviation one, normalized to the number of blazars. A similar result is obtained using analysis cuts optimized for soft-spectrum sources. (Right) The distribution of flux upper limits for the non-detected blazars in percentage of Crab Nebula flux above the observation threshold. The time-weighted average limit is less than $\sim 2\%$ Crab flux.

since the launch of Fermi include LAT detections. In addition, several MWL campaigns on the well-studied VHE blazars Mkn 421 and Mkn 501 (please see the contributions of D. Gall and A. Konopelko in these proceedings) were also performed. Highlights of these campaigns include:

- 1ES 2344+514: A major (50% Crab) VHE flare, along with correlations of the VHE and X-ray flux were observed from this HBL. The VHE and X-ray spectra harden during bright states, and a synchrotron self-Compton (SSC) model can explain the observed SED in both the high and low states [26].
- 1ES 1218+304: This HBL flared during VERITAS MWL observations. Its unusually hard VHE spectrum strongly constrains the EBL. The observed flaring rules out kpc-scale jet emission as the explanation of the spectral hardness and places the EBL constraints on more solid footing [27, 28].
- 1ES 0806+524: The observed SED of this new VHE HBL can be explained by an SSC model [16].
- W Comae: This IBL, the first discovered at VHE, flared twice in 2008 [14, 15]. Modeling of the SED is improved by including an external-Compton (EC) component in an SSC interpretation.
- 3C 66A: This IBL flared at VHE and MeV-GeV energies in 2008 [17, 18]. Similar to W Comae and PKS 1424+240, modeling of observed SED suggests a strong EC component in addition to an SSC component.
- Mkn 421: This HBL exhibited major flaring behavior for several months in 2008. Correlations of the VHE and X-ray flux were observed, along with spectral hardening with increased flux in both bands [29].

- RGB J0710+591: Modeling the SED of this HBL with an SSC model yields a good fit to the data. The inclusion of an external Compton component does not improve the fit.
- PKS 1424+240: The broadband SED of this IBL (at unknown redshift) is well described by an SSC model favoring a redshift of less than 0.1 [21]. Using the photon index measured with Fermi-LAT in combination with recent EBL absorption models, the VERITAS data indicate that the redshift of PKS 1424+240 is less than 0.66.

8. Conclusions

The first two years of the VERITAS blazar KSP were highly successful. Highlights include the detection of more than a 16 VHE blazars with the observations almost always having contemporaneous MWL data. Among these detections are 8 VHE blazar discoveries, including the first three IBLs known to emit VHE γ -rays. All but a handful of the blazars on the initial VERITAS discovery *target list* were observed, and the flux limits generated for those not VHE detected are generally the most-constraining ever. The excess seen in the stacked blazar analysis suggests that the initial direction of the VERITAS discovery program was well justified, and that follow-up observations of many of these initial targets will result in VHE discoveries. In addition, the Fermi-LAT is identifying many new compelling targets for the VERITAS blazar discovery program. These new candidates have already resulted in 3 VHE blazar discoveries. The future of the VERITAS blazar discovery program is clearly very bright.

The MWL aspect of the VERITAS blazar KSP has also been highly successful. Every VERITAS observation of a known, or newly discovered, VHE blazar has been accompanied by contemporaneous MWL observations. These data have resulted in the identifica-