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Probing the Extragalactic Background Light in the Fermi-VERITAS-HAWC Era ELISA PUESCHEL, University College Dublin, VERITAS COLLABORATION — The observed spectra of active galactic nuclei carry the imprint of gamma-ray interactions with the extragalactic background light (EBL). As gamma rays from an extragalactic source travel to the observer, pair production on the EBL plays a role in reprocessing the photons to lower energies, obscuring the intrinsic source spectrum. An overview of recent EBL constraints, which use blazar spectral measurements to constrain the EBLs spectral energy distribution, will be presented. Prospects for future EBL measurements capitalizing on the synergy between the Fermi-LAT, VERITAS and HAWC instruments will be discussed.

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