

S07a **A robust lower bound on intergalactic magnetic fields from Fermi/LAT and MAGIC observations of 1ES 0229+200**

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Secondary γ -ray emission from distant TeV sources induced by the effects of propagation of γ rays through the intergalactic medium could be used to measure the intergalactic magnetic field (IGMF). A proper realization of this opportunity requires a knowledge of the past source TeV luminosity evolution over the relevant period of time. Here we use the sample of MAGIC, H.E.S.S., VERITAS and Fermi/LAT observations to trace evolution of the hard-spectrum blazar 1ES0229+200 in the GeV-TeV band over ~ 15 years. This allows us to make a precise prediction of the timing properties of the time-delayed secondary γ -ray flux. We show that the non-detection of such an emission in GeV energy band yields a robust lower bound on the strength of IGMF.