## Modeling the non-flaring VHE emission from M87 as detected by the HAWC gamma ray

## observatory

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- M87 is a supergiant elliptical galaxy with an active nucleus (AGN), which is a well-established MeV, GeV and TeV gamma-ray source.
- The High Energy Water Cherenkov (HAWC) gamma-ray observatory marginally detected this source at E > 0.5 TeV (Albert et al, 2021).
- In this work we fit a lepto-hadronic model to a SED built to include the HAWC observations for the first time.
- We conclude that this scenario could explain the M87 VHE emission, including the possible gamma-ray spectral turnover which is also seen in other objects such as Centaurus A



Lepto-hadronic model fitted to a M87 SED occ