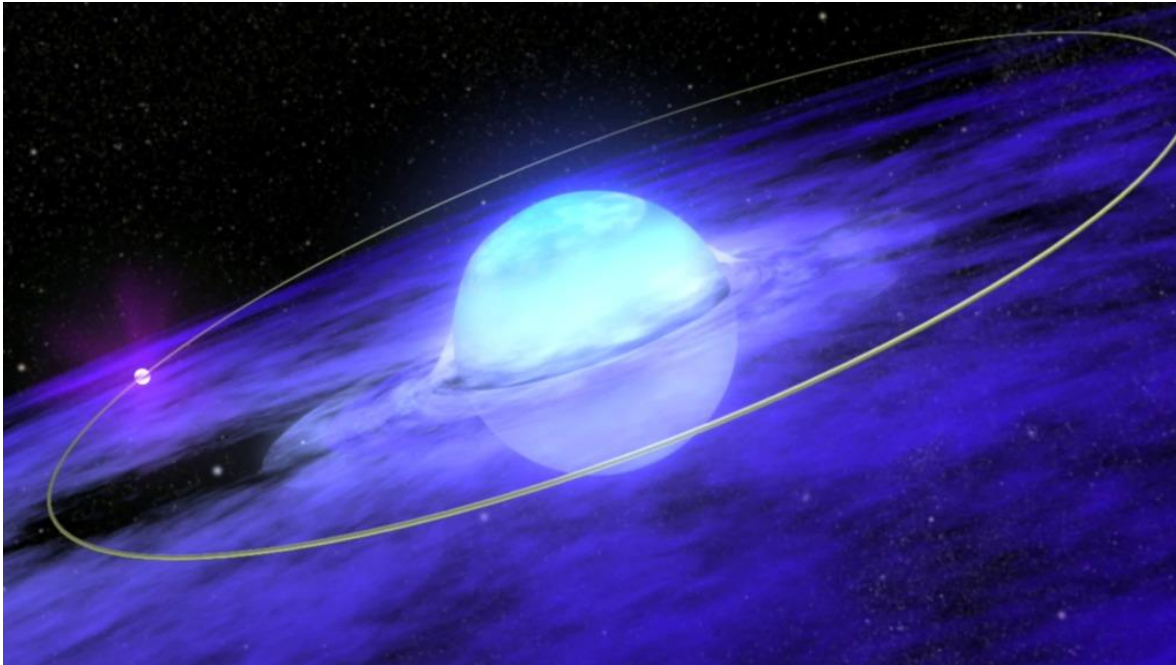


Leptonic Emission of HESS J0632+057



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CTA mid-size prototype, Adlershof

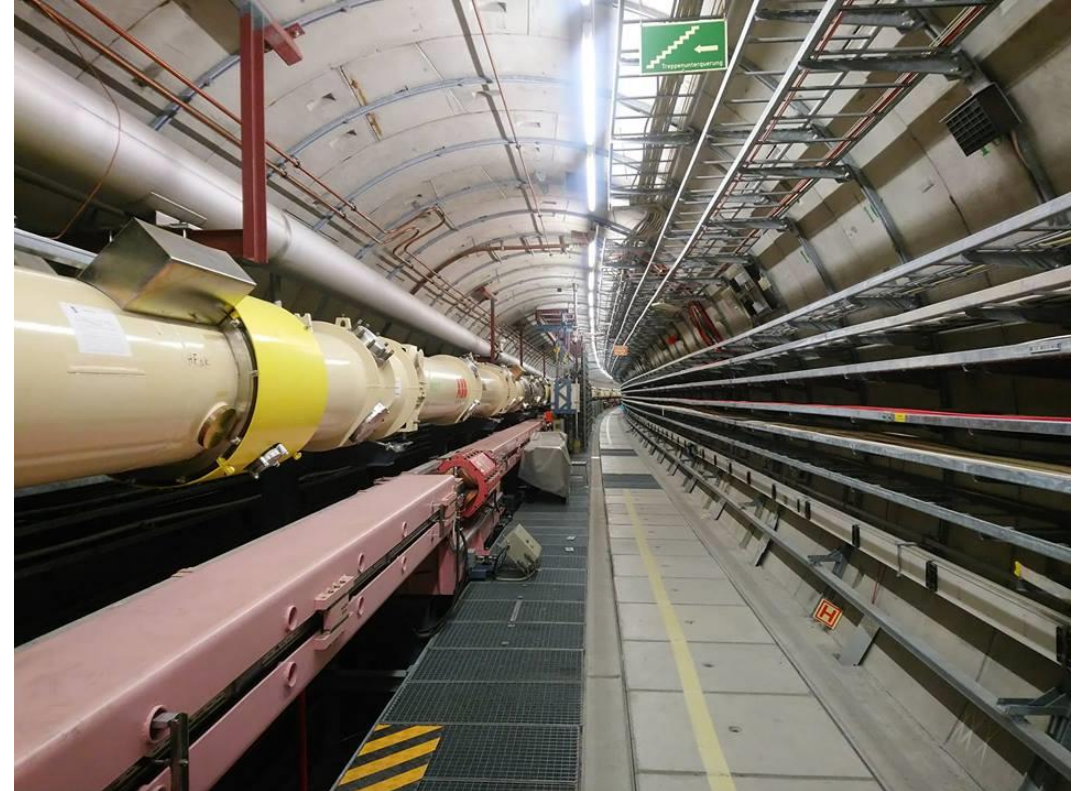


Visited the accelerators in Hamburg

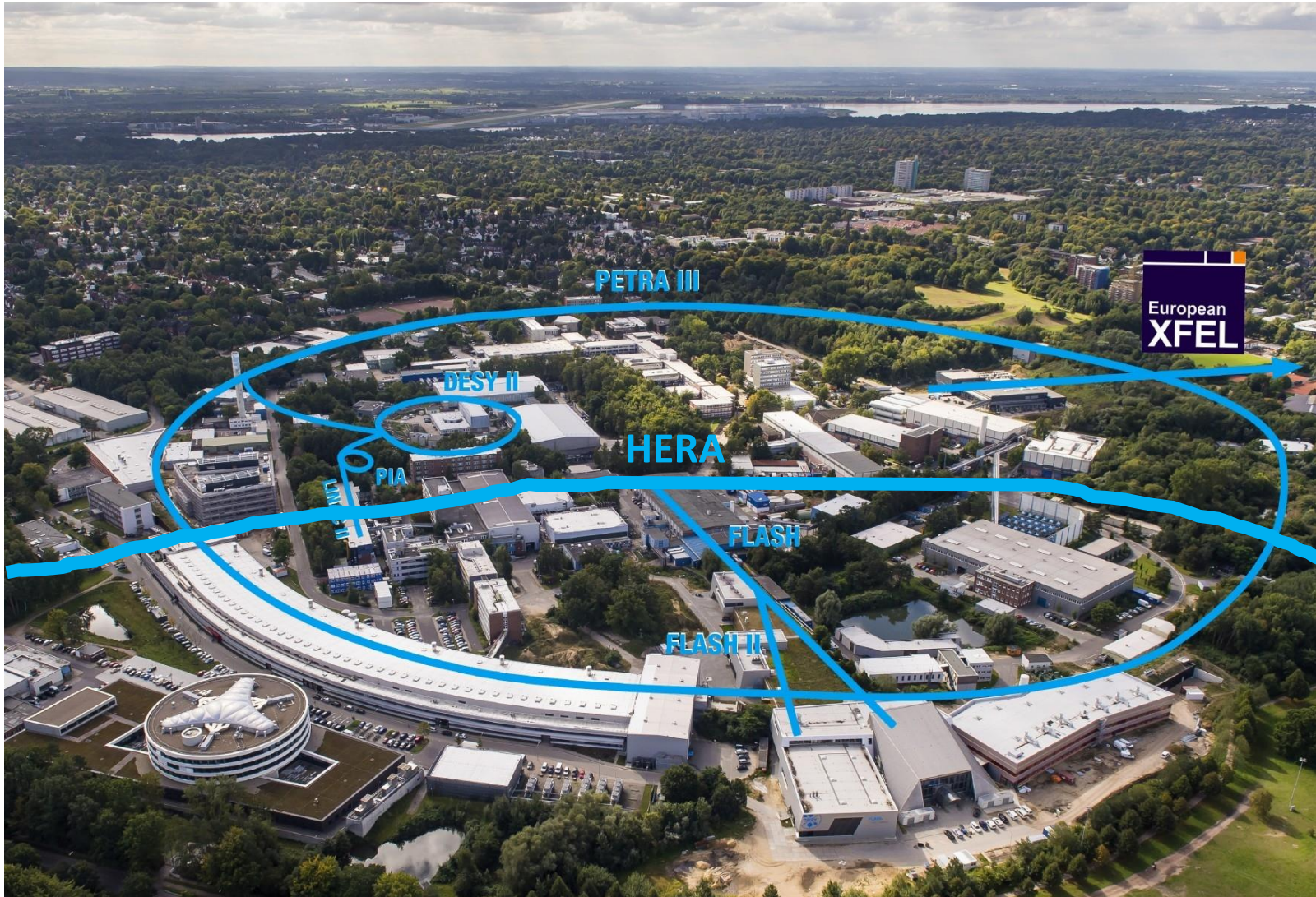
European XFEL : 2017 (3.4 km)



HERA : 1992 – 2007 (6.4 km)



15 to 30 m under DESY site in Hamburg



DESY Summer Student 2019

<http://www.nstda.or.th/desy/>

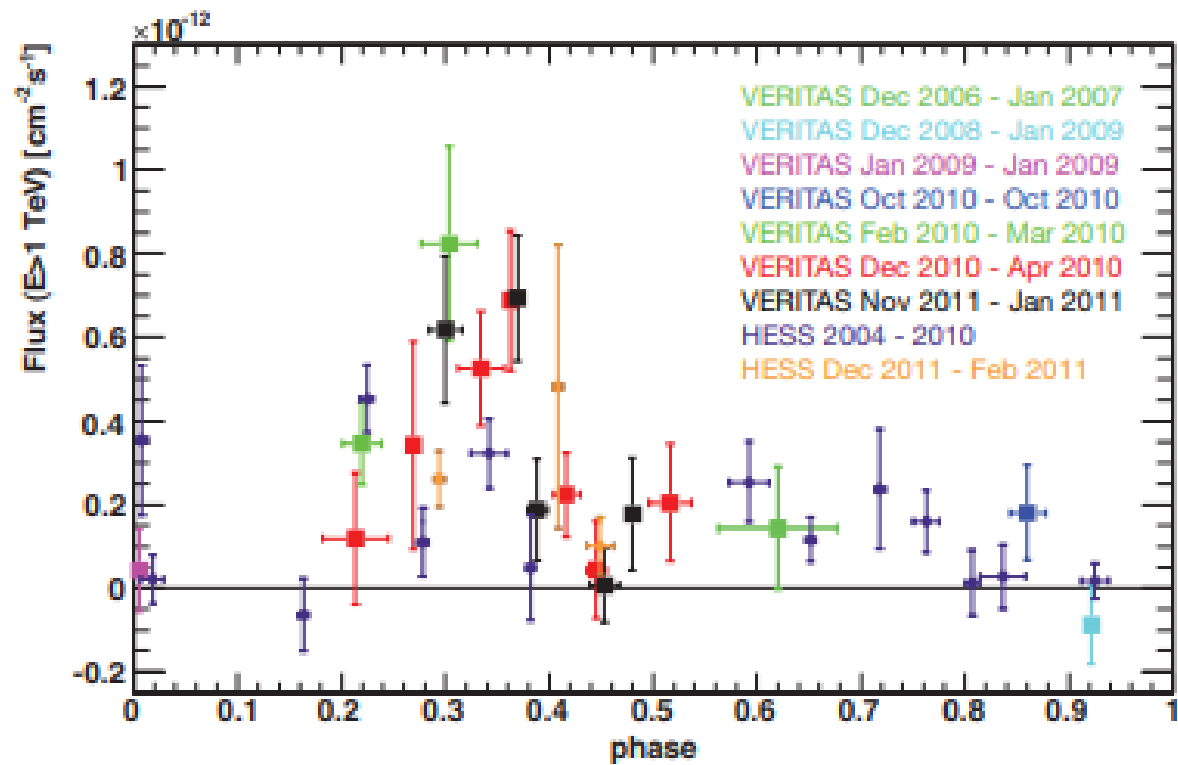
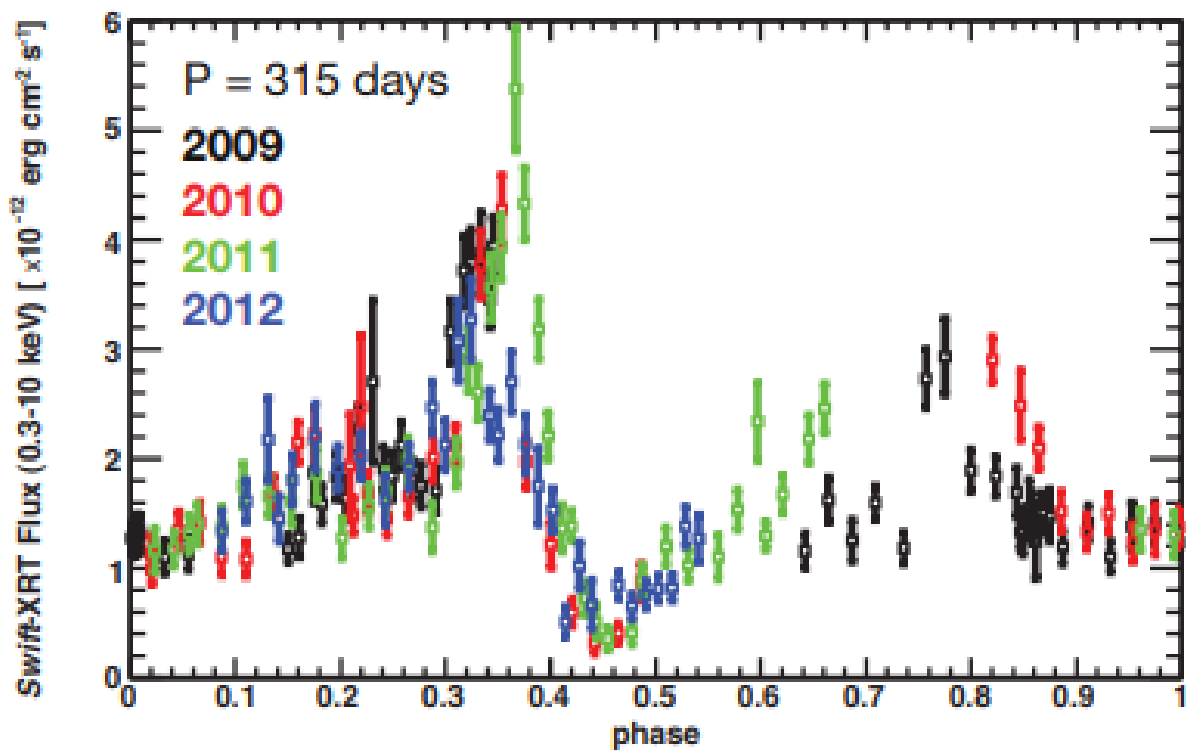
Dead line : 15 October 2018

Leptonic Emission of HESS J0632+057

HESS J0632+057

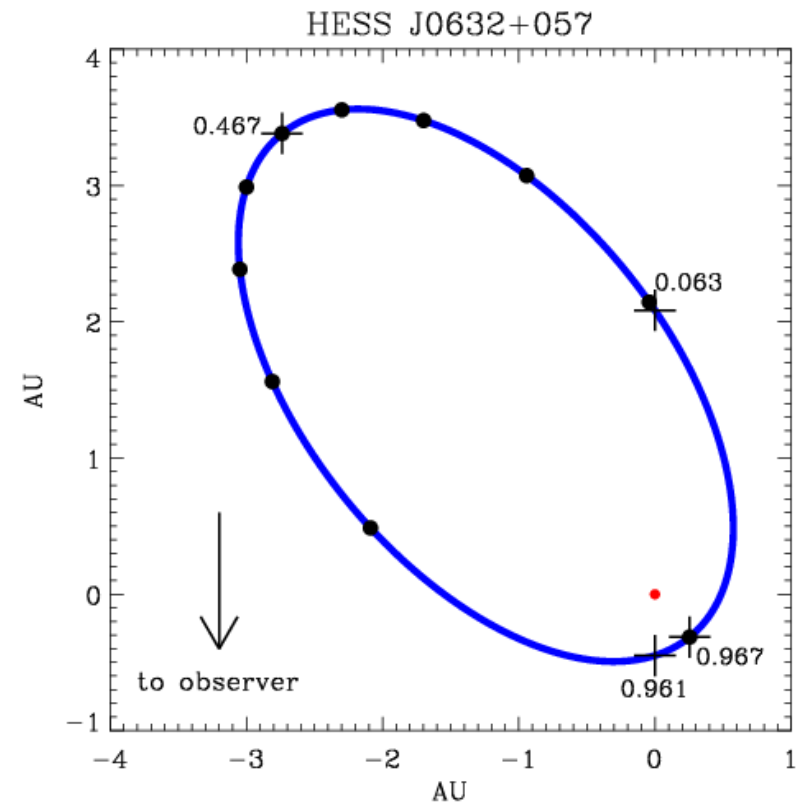
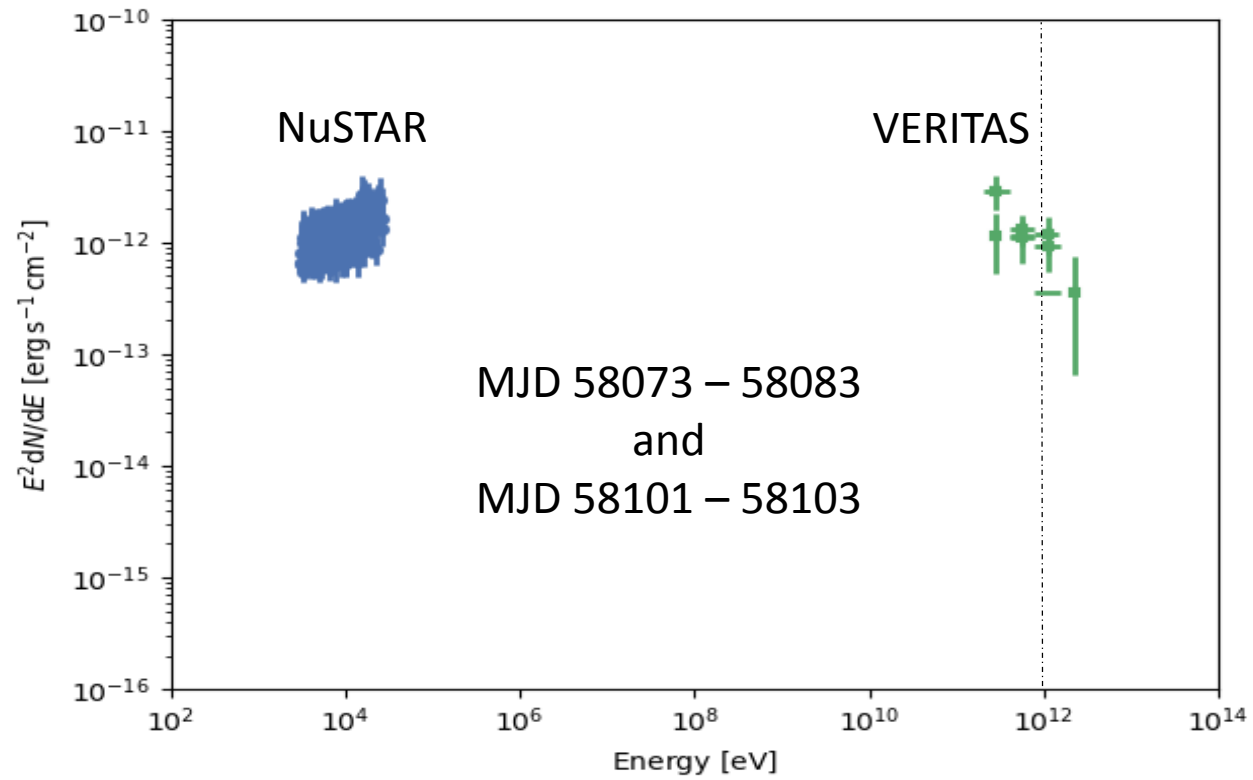
- Discovered by HESS in 2007
- Gamma-ray Binary System
- Emission from radio to VHE (>100 GeV)
- Emitted gamma-ray at TeV energies
- 1.5 kpc from Earth



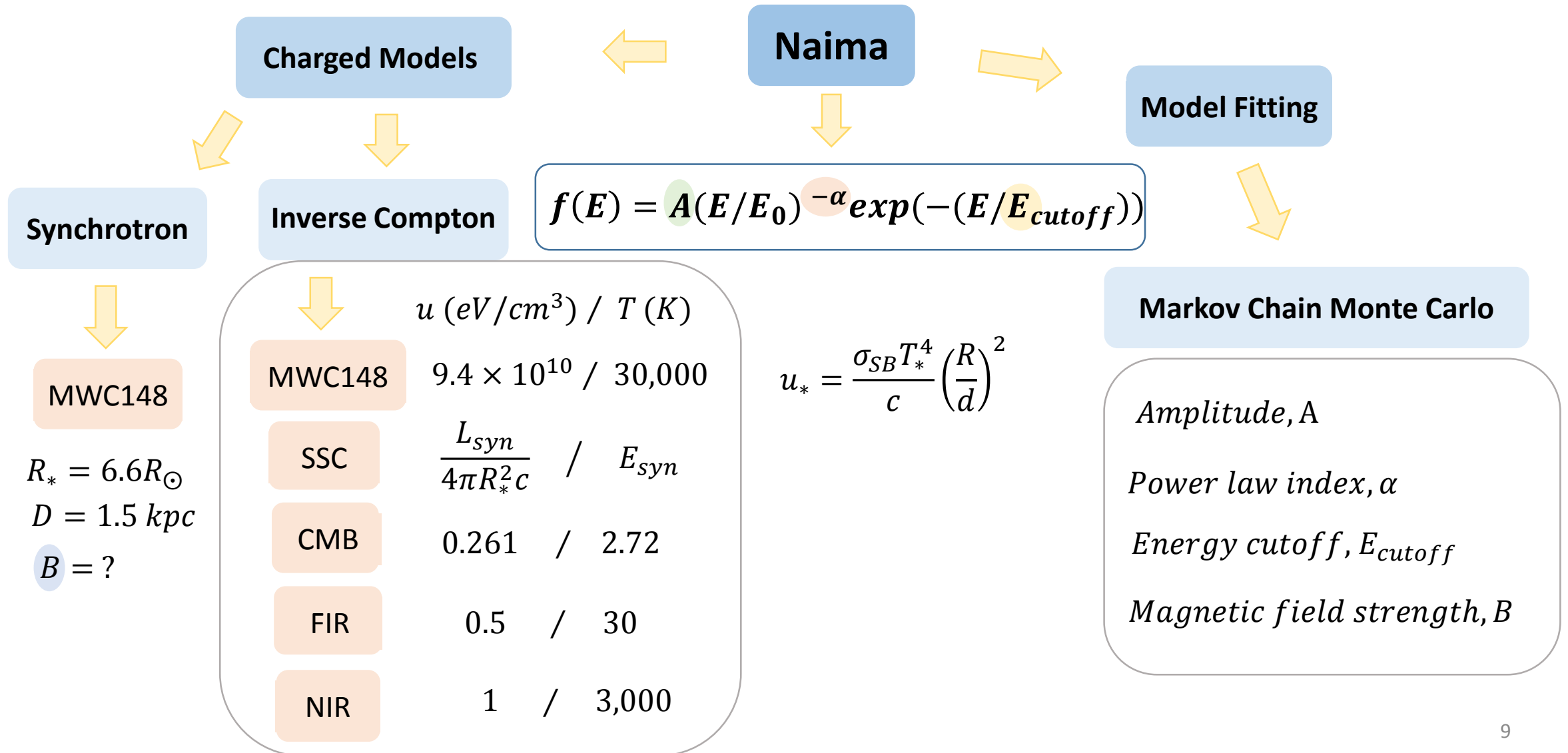


X-ray and TeV lightcurve folded on the 315 day period. (Bordas & Maier 2012)

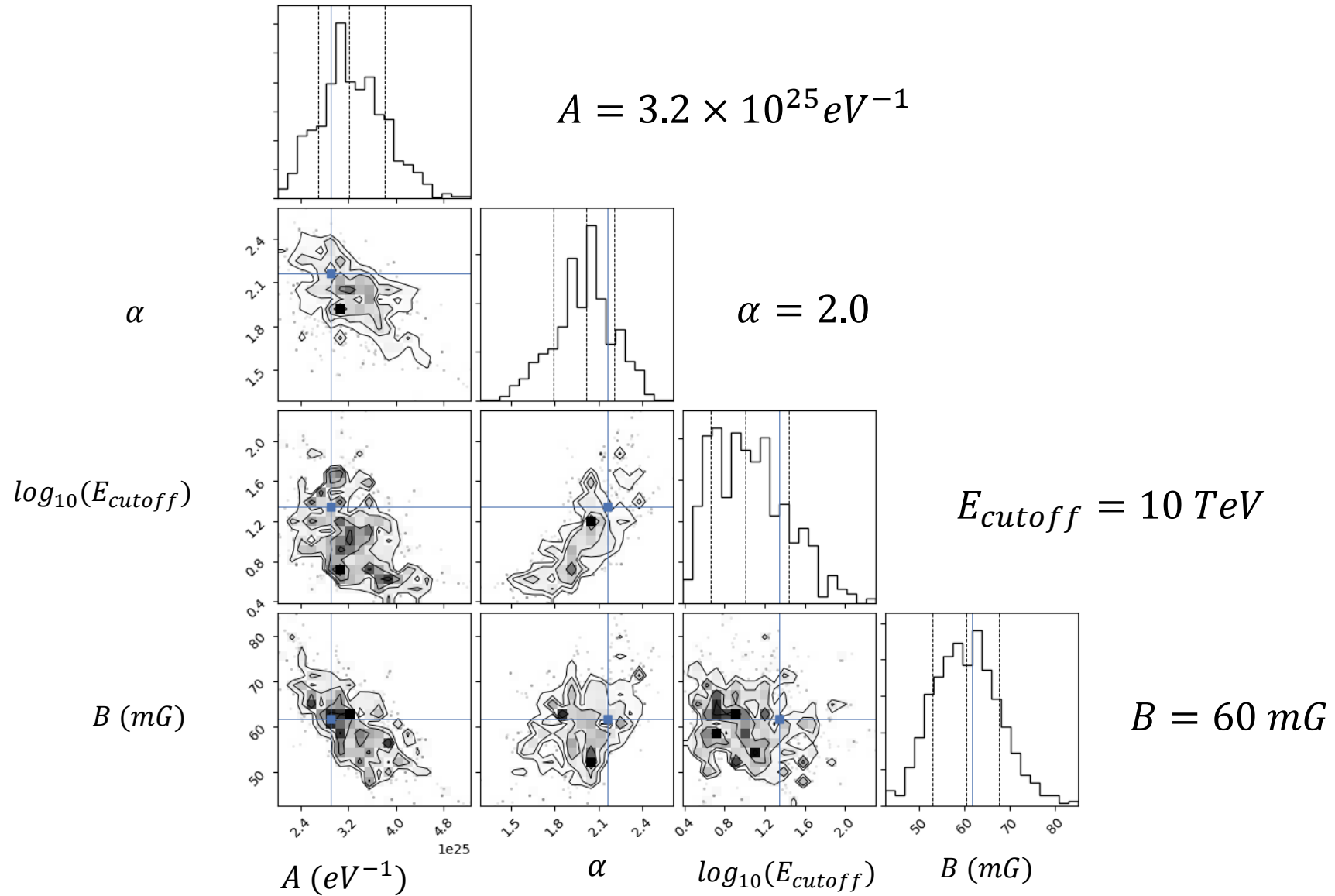
Data



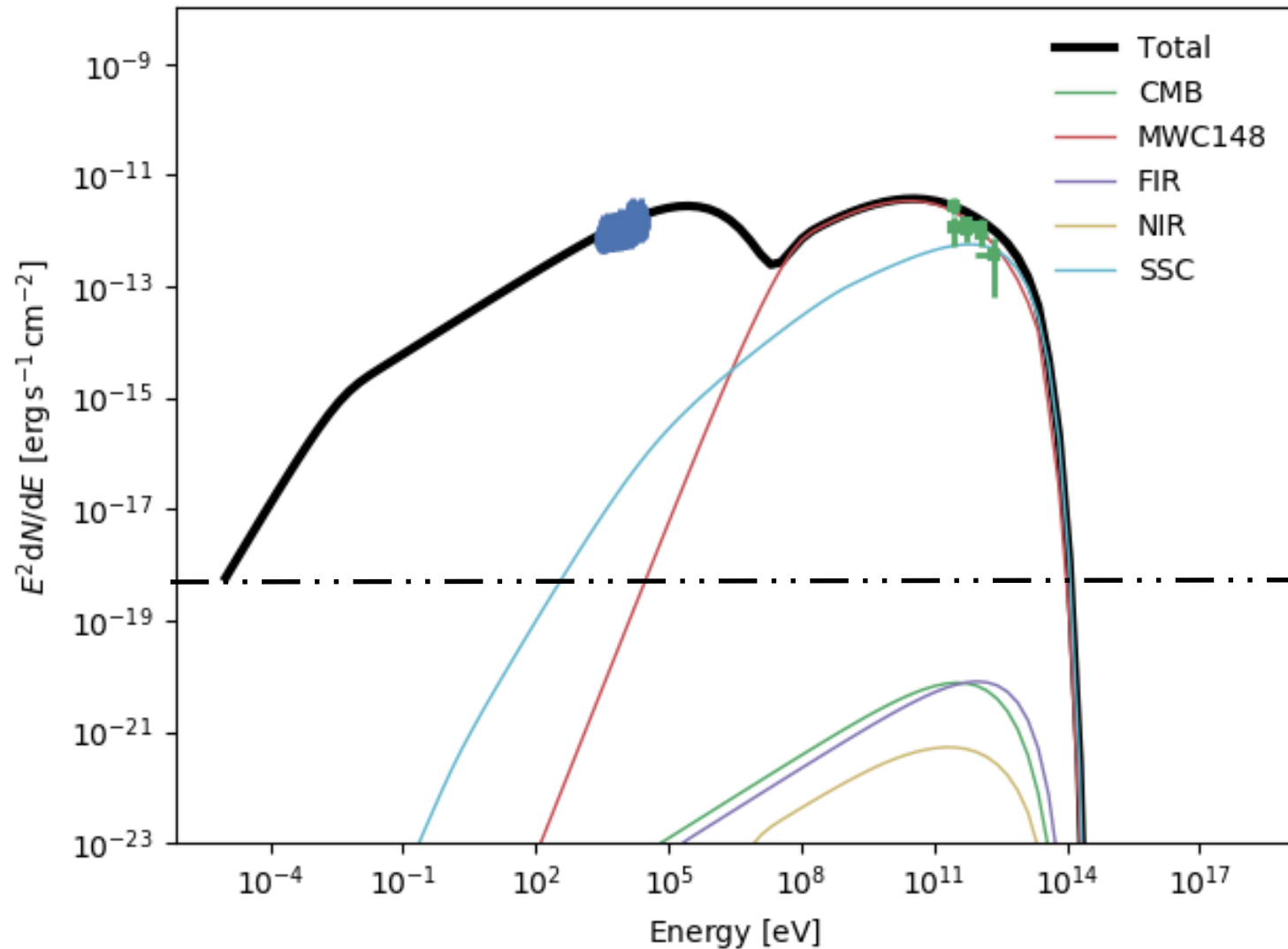
Methods



Fitting results

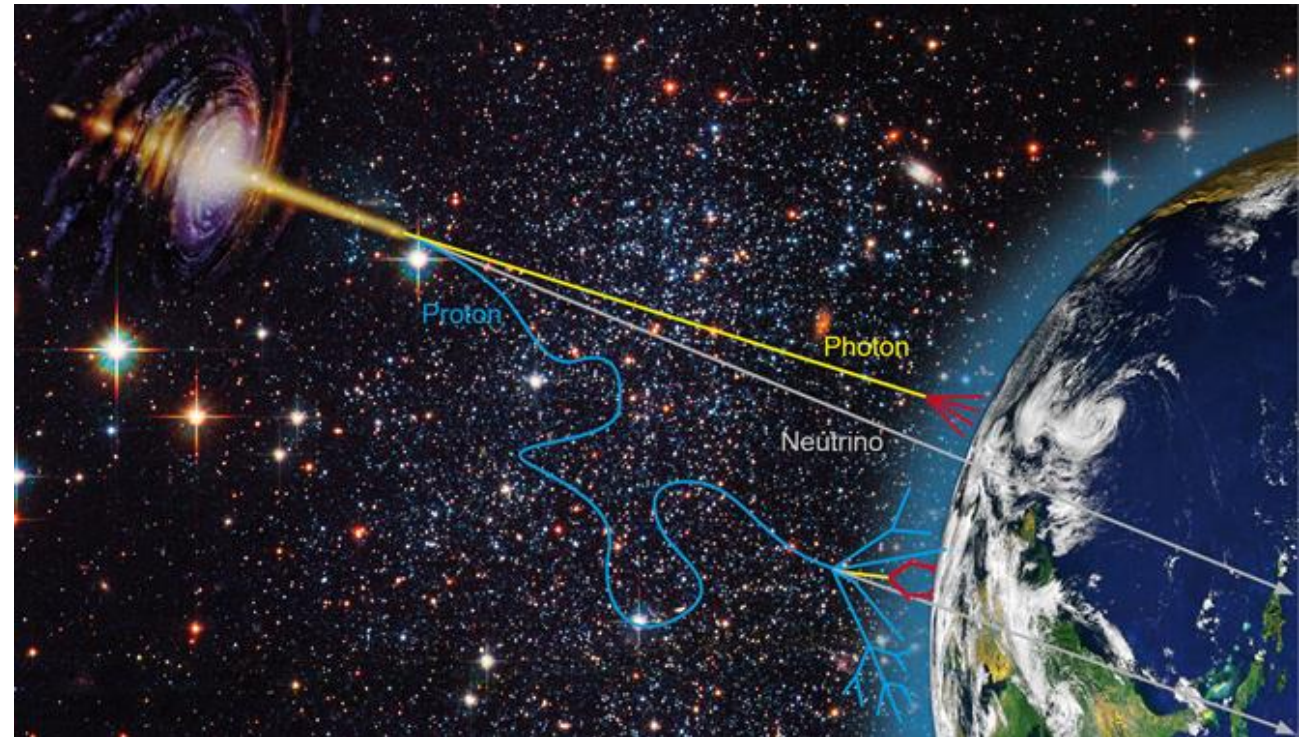
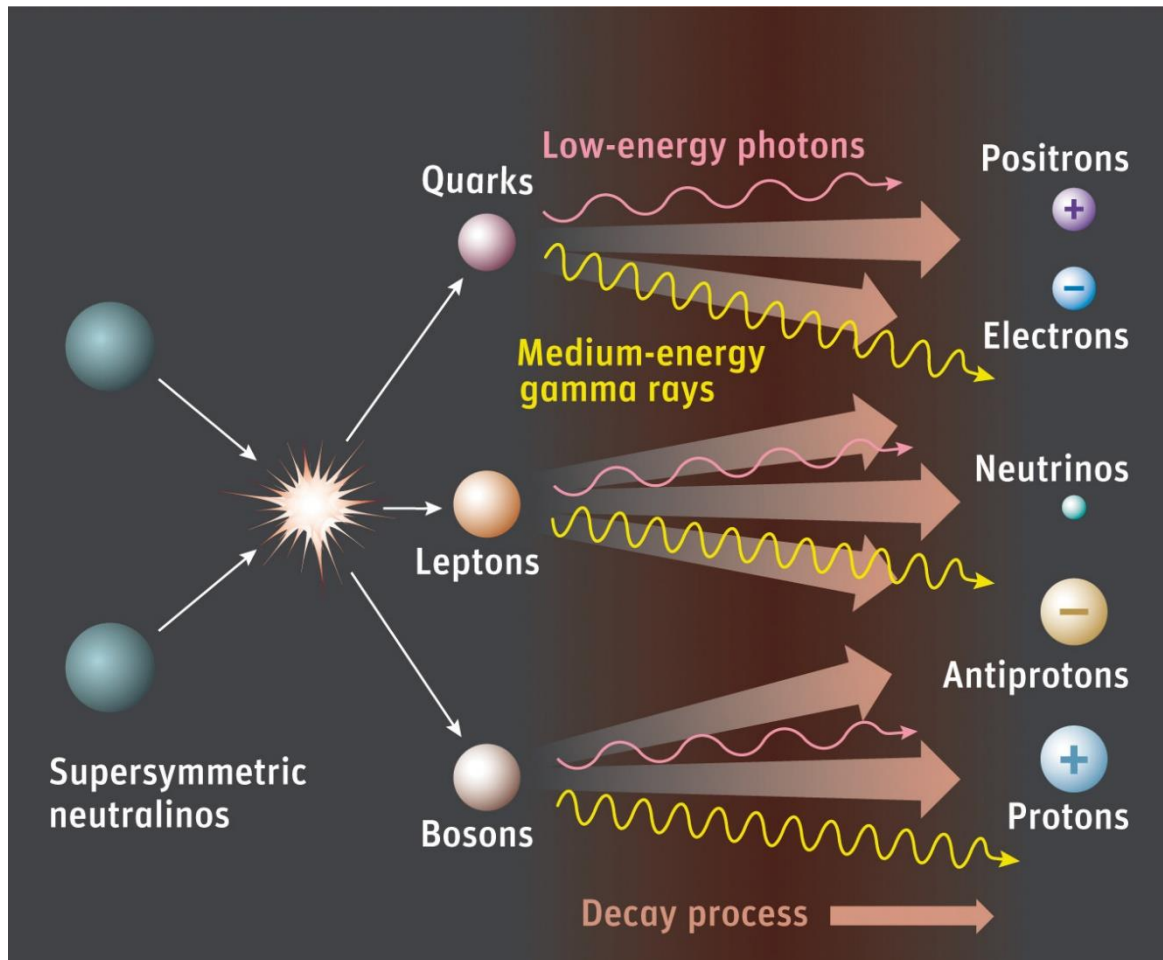


Result



- The data are compatible with the model emission
- dominated with seed photon originating from the massive star MWC148

Constraints on Dark Matter Properties by CTA





- Covering gamma-rays energies from 20 GeV to 300 TeV