



A curved jet model for the synchrotron emission of the BL Lac object PG 1553+113

C.M. Raiteri^a, A. Stamerra^{a,b}, M. Villata^a
for the Whole Earth Blazar Telescope (WEBT) Collaboration.

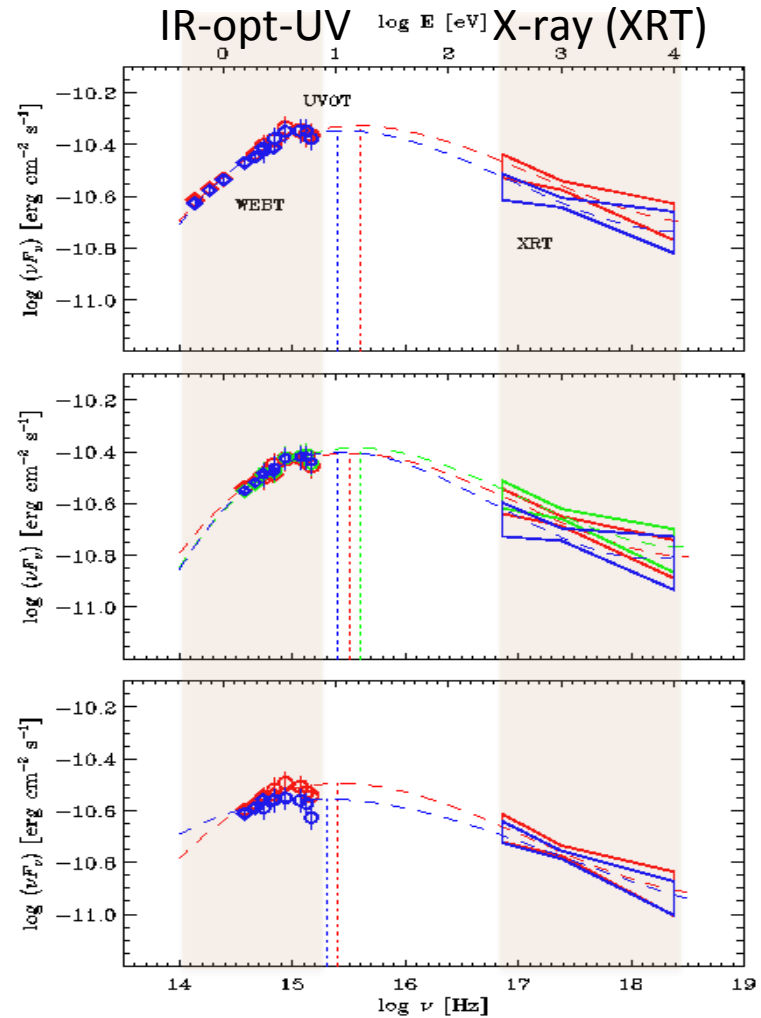
- Blazar, radio-loud, HBL, $z \sim 0.5$
- γ -ray emitter and TeV source

Evidence of ~ 2 year periodicity

A. Stamerra talk on Tuesday

- WEBT multi-wavelength campaign in 2013

The thumbnail shows the title page and abstract of the paper. The abstract states: "BL Lac objects, together with flat spectrum radio quasars, form the 'blazar' class of active galactic nuclei. Their observed properties, such as the variability of all frequencies, the relativistic precession, relativistic Doppler beaming of the radio component, are explained as due to beamed emission from a relativistic jet closely aligned with the line of sight. PG 1553+113 is a high-energy peaked BL Lac (HEBL) blazar. It shows a characteristic broadening of the UV and an inverse-Compton bump peaking in gamma rays. It exhibits a 200% variation in its emission, but some observational evidences [1] set around $\tau \sim 0.5$ years." The paper also mentions the 2013 multi-wavelength campaign by MAGIC and the use of a curved jet model to fit the data.



- Synchrotron peak ~ 10 eV
- Problem in connecting UV and X-ray



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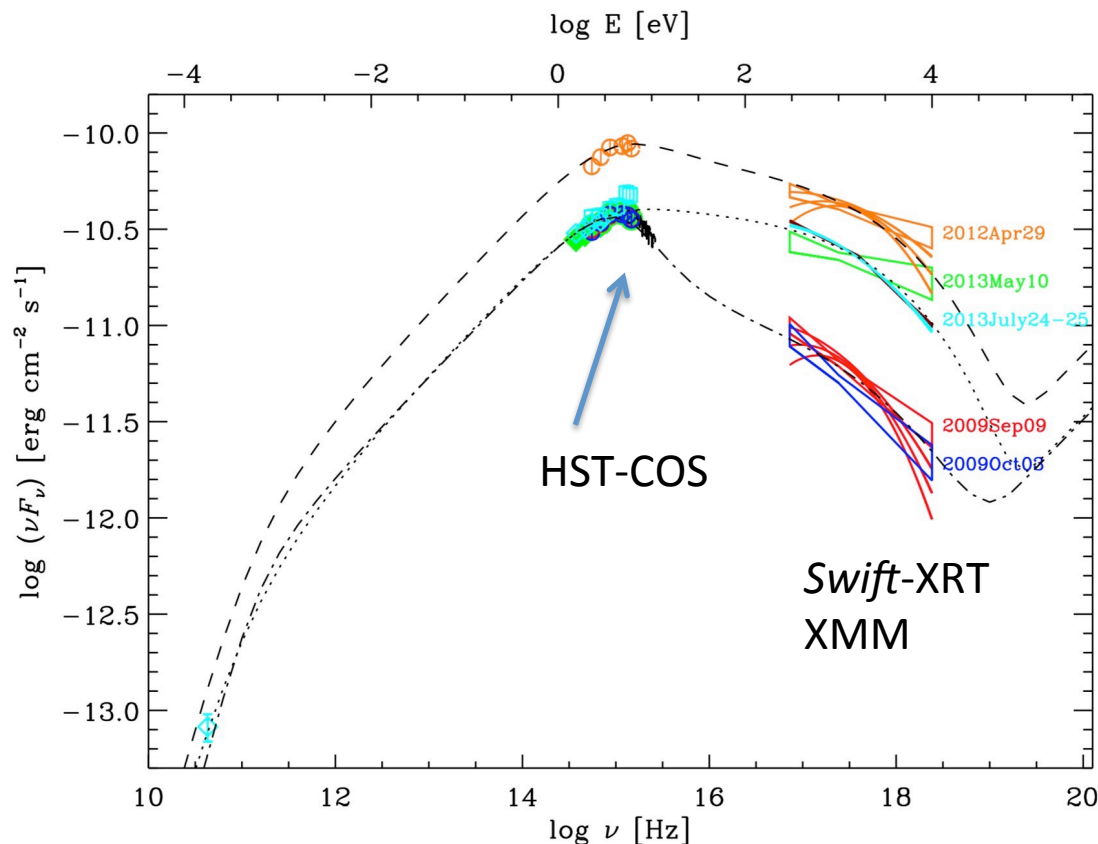
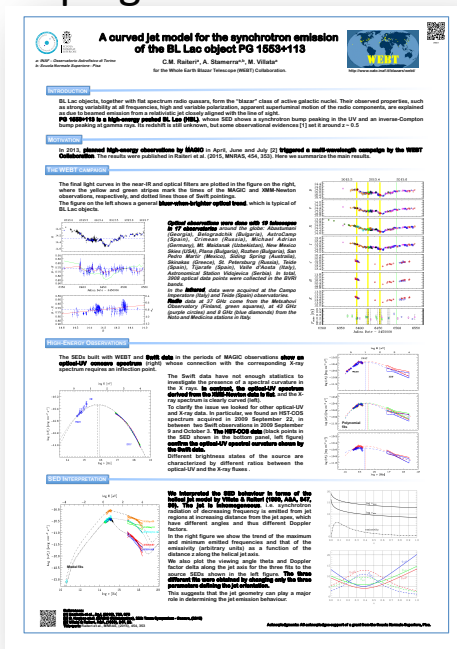
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- Archival data added to SED
- Fit with **helical jet model**
Villata & Raiteri 1999
- Different states can be fit just changing geometric parameters