

Testing Leptonic Models for AGN Jets with the GLAST LAT

Jennifer Carson

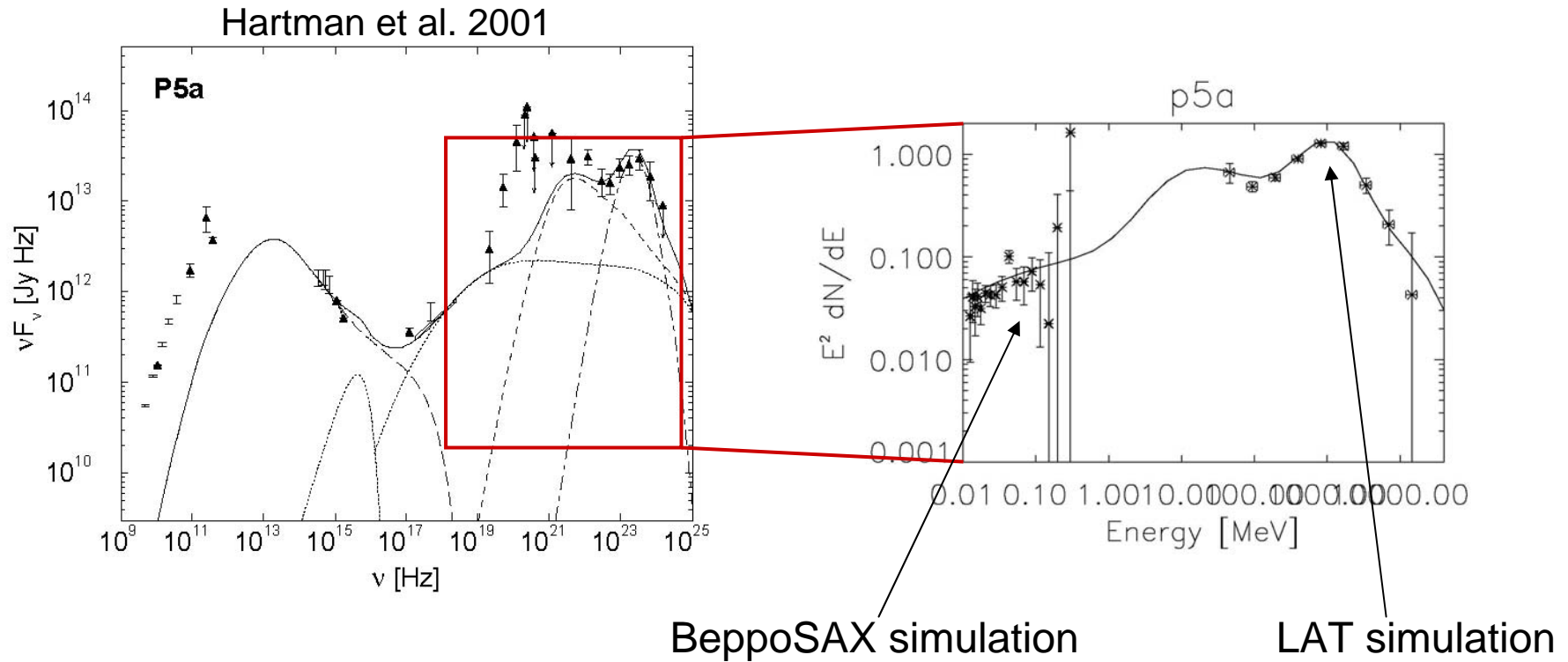
June 20, 2006

(draft of work for poster to present at
Krakow Jets Conference)

Overview

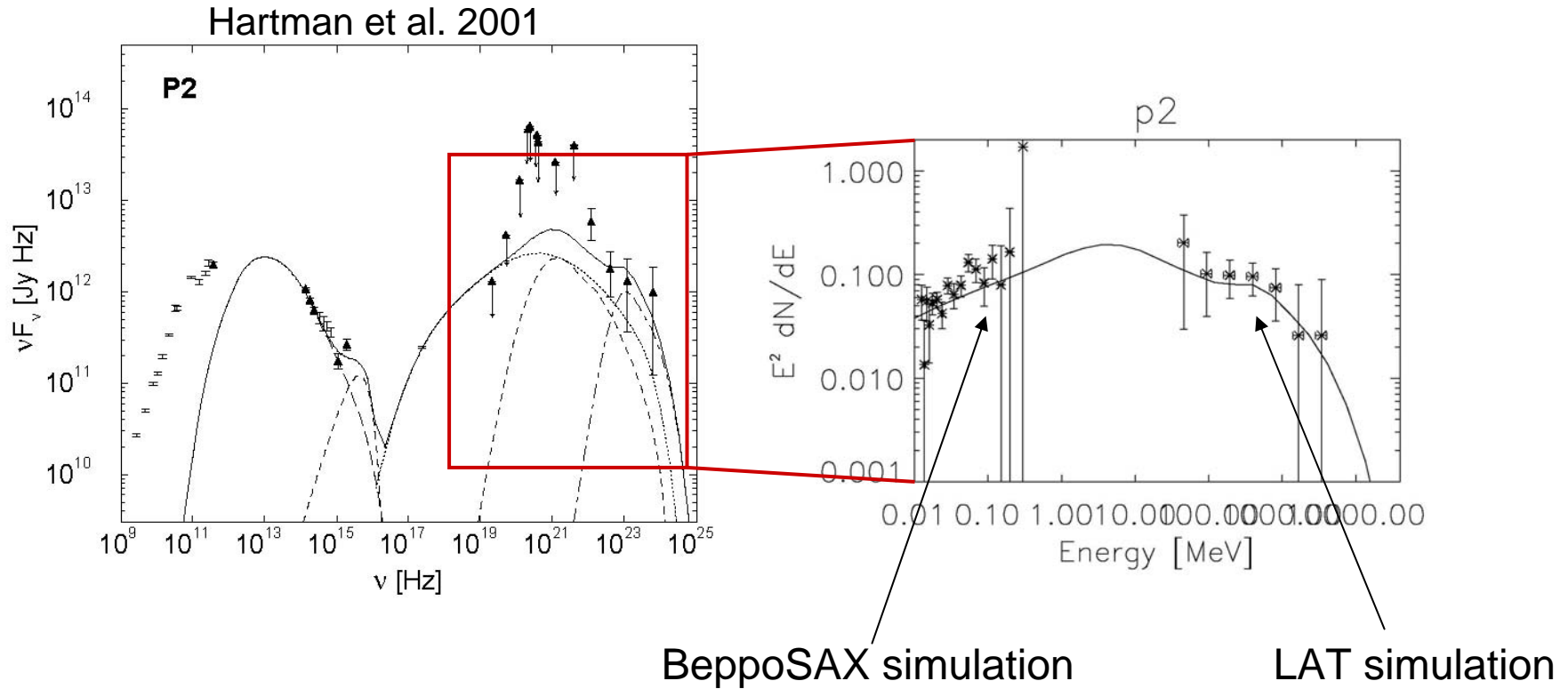
- Case study with...
 - 1 FSRQ: 3C 279
 - 1 LBL: W Comae
 - 1 HBL: Markarian 421
- ...for which detailed leptonic models exist.
- Time-average spectra (1 week – 1 month)
- Models include SSC + EC components
- How well can LAT observations constrain models?

3C 279 – Flaring State



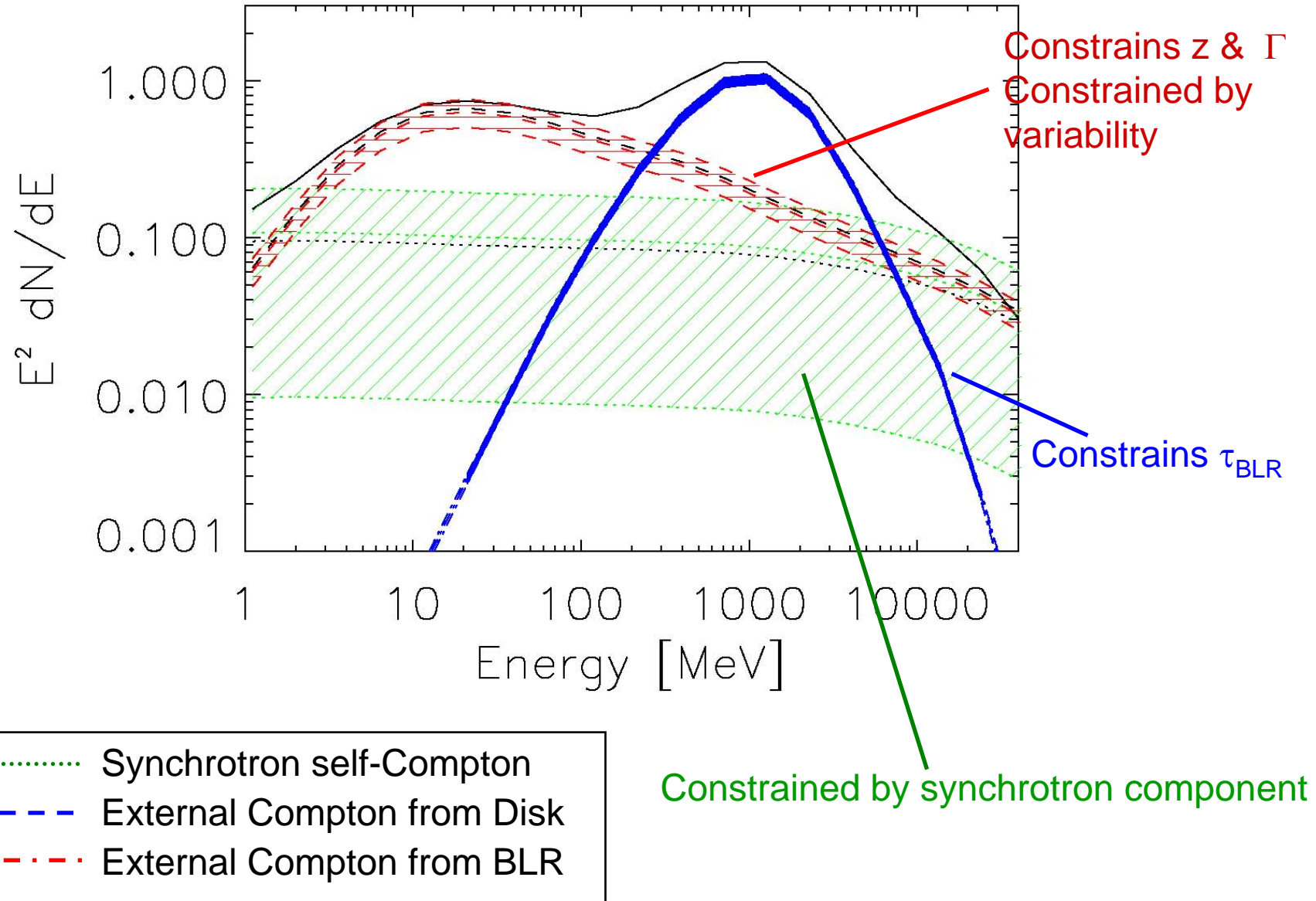
- Synchrotron self-Compton
- External Compton from Disk
- · - · - · External Compton from BLR

3C 279 – Low State



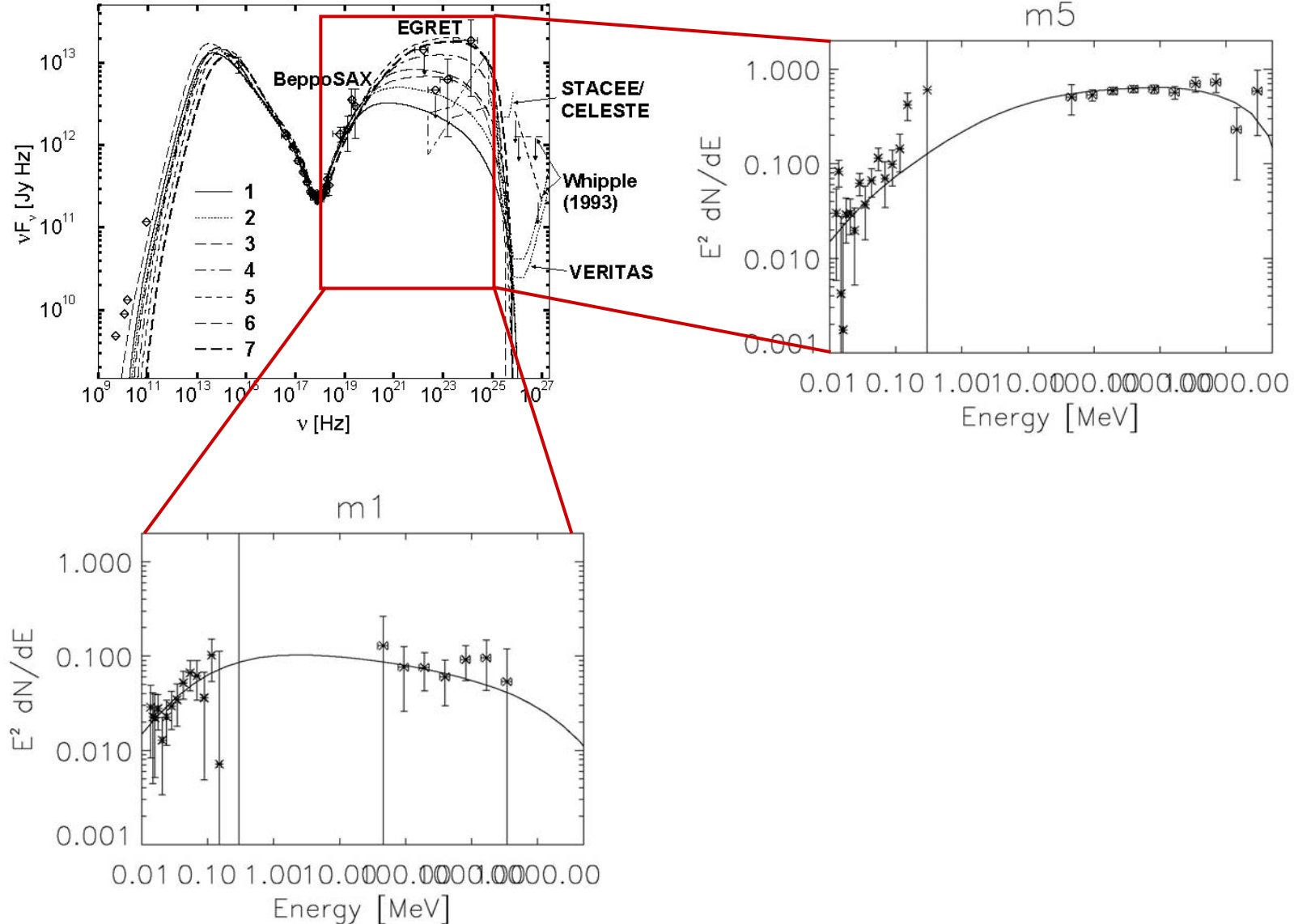
- Synchrotron self-Compton
- External Compton from Disk
- · - · - · External Compton from BLR

3C 279 – Likelihood Analysis



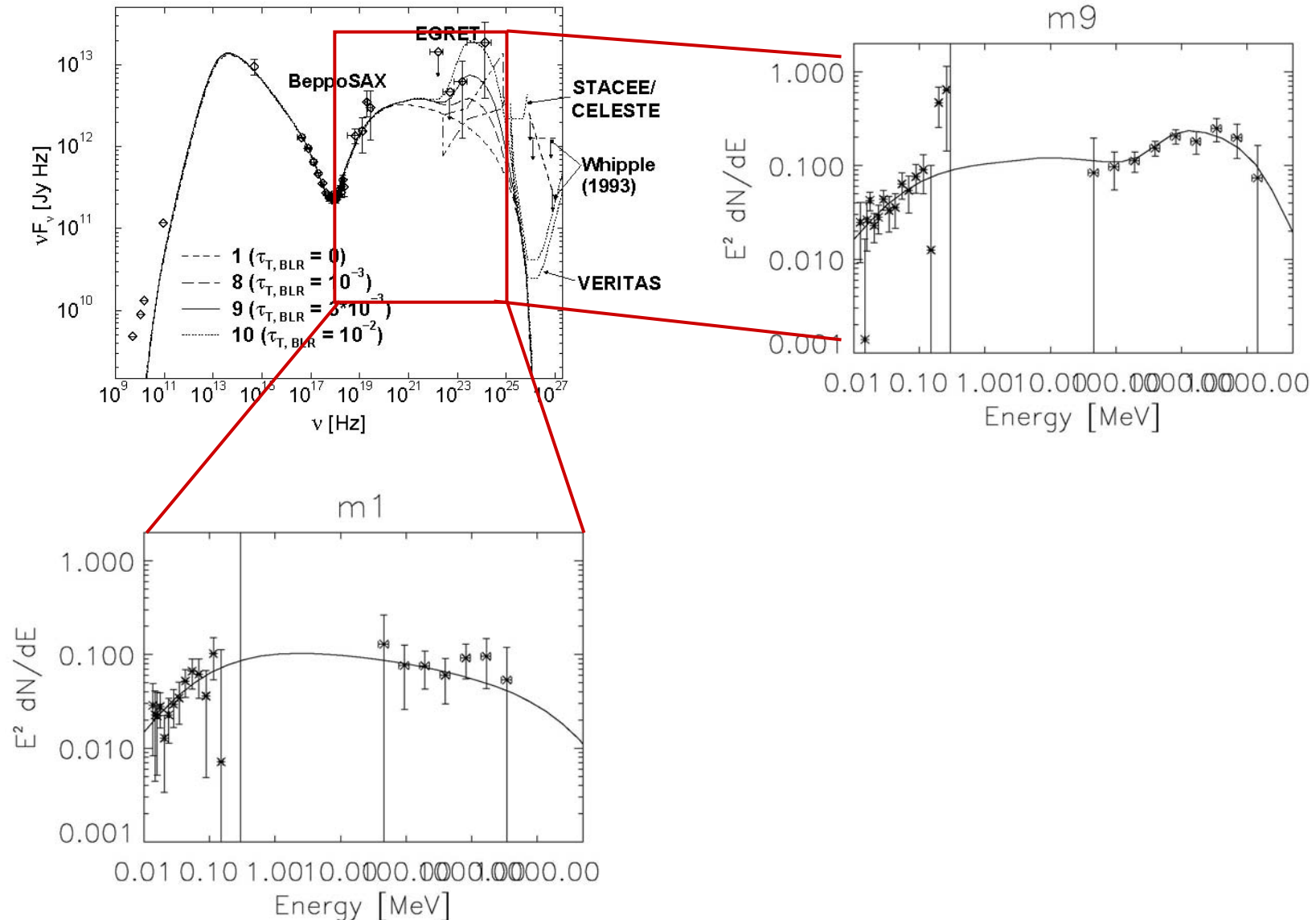
W Comae – Pure SSC Models

Boettcher, Mukherjee, & Reimer 2002

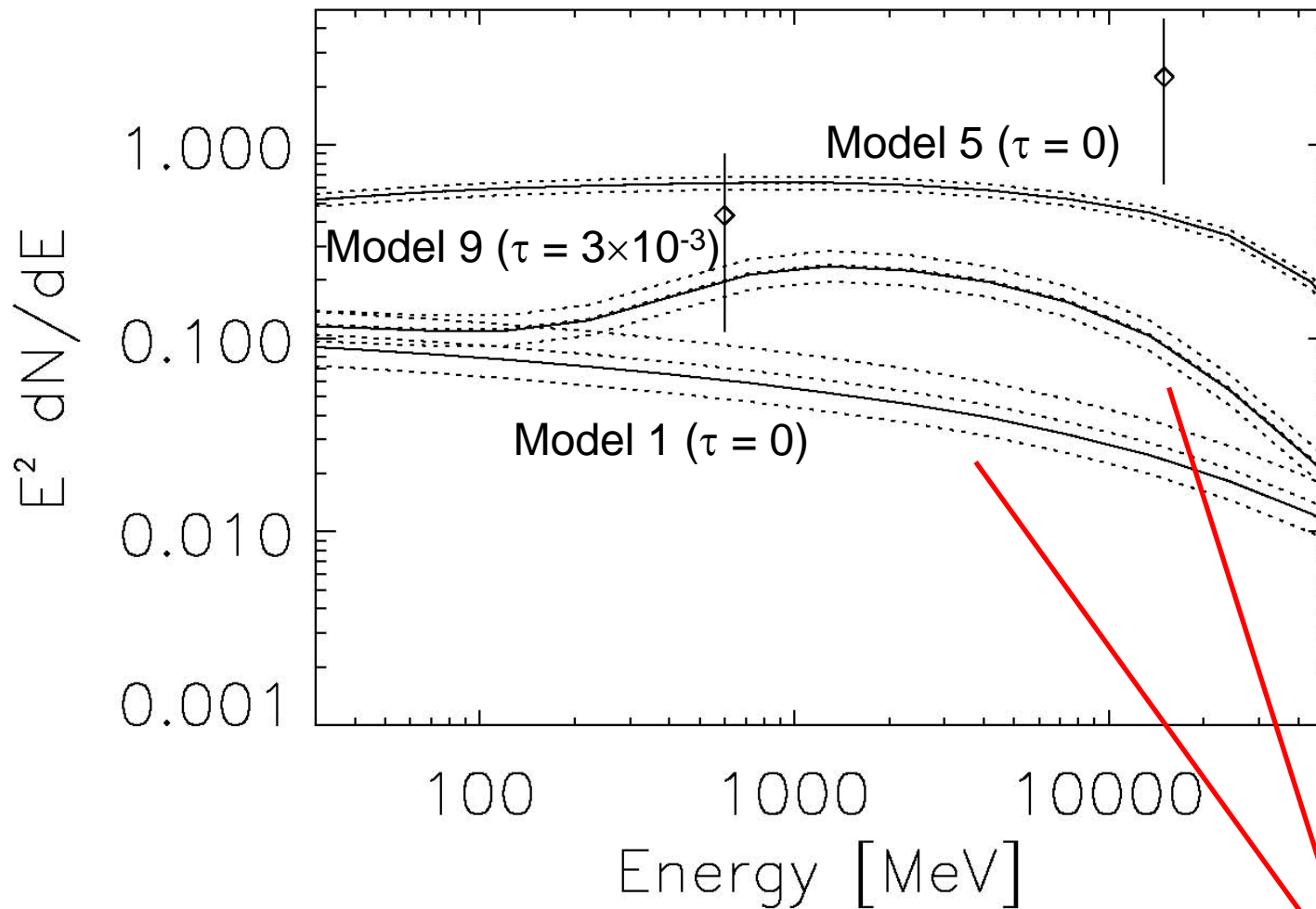


W Comae – SSC+EC Models

Boettcher, Mukherjee, & Reimer 2002



W Comae – Likelihood Analysis



(Data from EGRET)

Can constrain τ_{BLR} to $< 3 \times 10^{-3}$