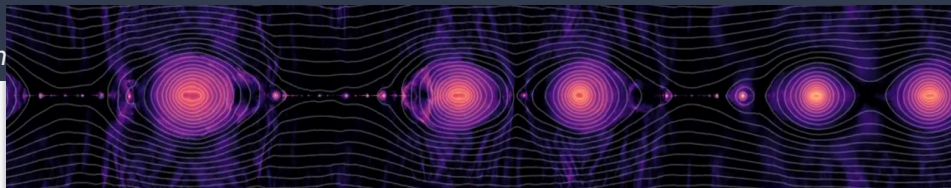


The observability of plasmoid-powered γ -ray flares with the *Fermi* Large Area Telescope

M. Petropoulou*, M. Meyer, I. Christie on behalf of the Fermi-LAT Collaboration



What is it about?

Fast γ -ray blazar flares from reconnection and their detectability with Fermi-LAT

Why is it interesting?

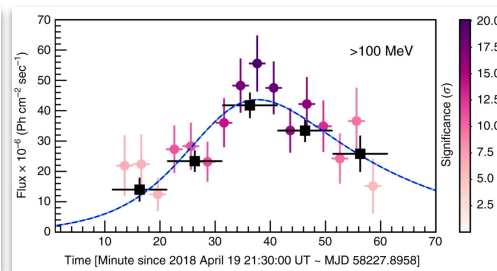
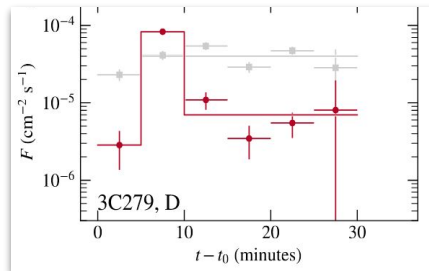
- Origin of fast γ -ray blazar variability is still a mystery!
- Magnetic reconnection models predict fast & luminous γ -ray flares.

What did we do?

- We created for the first time artificial LAT light curves based on the magnetic reconnection model.
- We searched for detectability of model-predicted features with LAT.

What did we find?

- General features of real LAT light curves are recovered in the artificial LCs
- Minute-scale flares are detectable with LAT during GTIs



If you would like to learn more, watch our video!