

Multiwavelength Workshop at the Sixth International Fermi Symposium

The Multifrequency (or Multiwavelength) Workshop will be held on Friday afternoon, November 13, from 2:00 until 6:00 (or earlier if we decide). This will be an informal discussion of the future plans for Fermi and related facilities. The primary focus will be on AGN, since most of those who have registered are interested in that topic. We can change the agenda if other topics emerge.

To register for the workshop, or to express your thoughts about these topics, please fill out some or all of the questionnaire at <http://goo.gl/forms/qmQv4aFxmK>

The organizers suggest working around some scientific or programmatic themes. We can try to identify a moderator for each theme and then find a second person to take notes - volunteers are welcome. Instead of a formal document, these notes would be the product of the workshop.

For each topic, consider these questions:

What are we trying to learn?

How can more Fermi observations contribute?

What are the key multiwavelength/multimessenger observations that are needed?

Which of these are really practical to achieve?

What theory/modeling is needed to support observations?

- [Dave Thompson's notes from the workshop](#)
- (also [Fe's notes from the workshop \(PDF\)](#); and [Stefano C's further notes from the workshop](#)).

Agenda

2:00 - 2:15 Introduction and finalization of the agenda

2:15 - 3:00 AGN Variability - Discussion leader: Alan Marscher - [Alan's Slides](#)

Are there patterns of variability in gamma rays that relate to other observables (polarization swings and VLBI ejections have been suggested. Others?)

Some coincidental features in different bands have been found that require confirmation. In Krakow, Paolo Coppi reported some other features, like a UV flash taking place right before a major flare.

3:00 - 3:45 AGN Demographics - Discussion Leader: Matt Lister - Google Docs: tinyurl.com/agndemographics

What do we learn from blazar sequence, blazar divide, FSRQ/BLLac differences, near/far emission regions or other ways of sorting AGN by various properties?

What do we learn from high-energy sources missing in the LAT catalogs?

How crucial is it to properly characterize (FSRQs vs BL Lac, measure redshifts) the large (and increasing) fraction of LAT blazars lacking this information?

[Matt's spreadsheet about blazar monitoring programs](#)

3:45 - 4:00 Break

4:00 - 4:45 AGN SED Modeling - Discussion leader: Justin Finke - [Slides](#)

With the large number of parameters used in AGN SED modeling, has any trend emerged about which of these are really important? Is there real hope of distinguishing leptonic from hadronic models?

Is there any existing compilation of parameters that would allow this trend to emerge?

4:45 - 5:30 Observing strategy - Discussion leader: Stefan Wagner - [Slides](#)

While it would be great to have every AGN monitored at every wavelength all the time, that is not practical. Should we have more intensive pre-planned campaigns on certain AGN or rely on notices of activity to trigger campaigns?

Can we identify important MW data that were missed so far and that we should work hard to get ?

5:30 - 6:00 Open discussion