Minutes of the Blazar Working Group Meeting, October 4 2005

Attendees: A. Chen, J. Chiang, C. Dermer, P. Giommi, S. Larsson, B. Lott, G. Madejski, A. Reimer.

The presentation slides are posted at:
http://www.cenbg.in2p3.fr/ftp/astropart/glast/agn_group/meeting_page.htm

1. Science goals and associated observations

Chuck Dermer has presented three additional science goals to be added to the list established by Greg Madejski and Anita Reimer.
The first one addresses the possibility for blazars and radio-glaxies to accelerate ultra-high energy cosmic-rays. This goal is directly related to the question of the plasma nature, hadronic or leptonic (science goal 11), and relies on the observation of orphan flares without associated optical/X-rays synchrotron component.The second goal is to test the Compton scattered CMBR interpretation of Chandra jet for PKS0637-752. This can be established by measuring the minimum steady flux of the source. The third goal deals with the study of energization sites and bulk relativistic speeds of blazar jets. The approach is based on attenuation arguments to set a lower limits on the bulk Lorentz factor.
At some point, the whole list should be expanded into a document to be included within the MW observation plan.

2. Blazar Sequence

Paolo Giommi has presented a series of arguments against the "blazar sequence", i.e. an anticorrelation between bolometric luminosity and peak energy. This conclusion was reached by different independent studies, using a larger, unbiased sample of blazars than the original work. However, some intrinsic, physical limit may be at work in strong-lined, high-power blazars, preventing high synchrotron ν_{peak} to be reached. Paolo suggests to reformulate the corresponding science goal accordingly.

3. LAT performance Benoit Lott as briefly presented a few simulation results illustrating the LAT performance with regard to variable sources. In survey mode, the integrated flux above 100 MeV has to be greater than 10^-5 ph $cm^{-2}s^{-1}$ for the flux and power-law index to be determined with an accuracy better than 10% over a integration time of one orbit ($\simeq$ 40 min of good time interval). In the EGRET era, this very high flux was only exceeded by PKS1622-297 during the spectacular flare of 1996.

4. Next meeting

Next meeting will be held on October 18 at 9:00 AM PDT.