Minutes of the Blazar Working Group Meeting, December 29 2005

Attendees: R. Cameron, J. Carson, S. Ciprini, J. Chiang, W. Collmar, E. do Couto e Silva, S. Germani, P. Giommi, B. Lott, G. Madejski, A. Reimer, R. Romani, D. Smith, G. Taylor, G. Tosti.

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

1. Simulated Blazar Survey

Paolo Giommi has presented his Monte Carlo simulation aiming at producing a realistic blazar sample. The simulation uses a radio luminosity function and extrapolate the radio flux to other bands using a SSC model. Constraints arising from observations are taken into account, as well as evolution compatible with the existing data. Good agreement is found between simulated distributions and those observed for blazars of the RASS-NVSS-SLOAN sample (about 1000 of which would have a gamma-ray flux above GLAST sensitivity). Starting out with a radio limited sample, about 4000 sources would meet that conditions. The simulation predicts that most sources would be located at low redshifts and only detected inflaring states. The redshift distributions for both FSRQ and BLLacs are very different from those predicted by Dermer and Davis for example, which calls for further investigation.

2. LAT performance

Benoit Lott has used the ScienceTool to calculate the accuracy with which fluxes and index of varibale sources can be measured as a function of flux and time. The calculations were made for a constant index and position in the sky. The results show that to get an accuracy better than 20% on the flux over a time shorter than 40 minutes, the flux (E>30 meV) has to be greater than $10^{-5} cm^{-2} s^{-1}$, which was observed with EGRET only on two occasions.

3. Next meeting

Next meeting will be held on December 13 at 9:00 AM PDT.