Minutes of the Blazar Working Group Meeting, August 19 2005

Attendees: J. Chiang, P. D'Avezac, T. Kamae, P. Giommi, B. Lott, G. Madejski, J. McEnery, P. Michelson, L. Reyes, R. Romani, J. Scargle, L. Wai.

As usual, the slides are posted at:
http://www.cenbg.in2p3.fr/ftp/astropart/glast/agn_group/meeting_page.htm

The meeting has mostly been devoted to the preparation of the different sessions concerning the group activity at the collaboration meeting.

Parallel session of the Blazar Group (Wed. 31, 8:45-10:30M)

After discussion, it has been agreed on that we will split up the session in two parts. The first part (45') will be devoted to the group organization, the work plan, the preparation for DC2, the open action items. The second half of the session will concern EBL issues: 3 short presentations (10') will be given by Luis, Roger, Paolo, on their activity/views followed by a general discussion to define a common strategy. There are several recent concording data indicating that EBL density may be significantly lower that assumedso far.
Incidentally, the issue of who should define the strategy for variability analysis has been briefly touched. It seems natural that the blazar group will be responsible for this task, as it has the expertise.

Discussion of Catalog Source Identification process (Tuesday 30, 1PM-4:40PM)

Our group will be responsible for defining the prescription for blazar idenfication to be used in the context of the GLAST catalog, which is equivalent to an "operational definition of a blazar". Two methods have been developed by members of the group, based on a blazar region in the α_{ox}-α_x plane (P. Giommi et al.) and a Figure of Merit established form the X-ray flux, the radio flux at 8 GHz and the radio index (R. Romani et al). These methods were presented during the VRVS meeting on July 8. Pros and cons of the two methods will be discussed at the session. Paolo is doing simulations in this regard. He and Roger have agreed to meet next week to make progress on this issue.

Multiwavelength Needs/Issues (Tuesday 30, 1PM-4:40PM)

The MW strategy concerning Blazar Studies is still to be developed. Recommendations of the AdHoc MW Committee must be reviewed and updated. The list of contact persons working in other bands and interested in collaborating must be established. A lot of interest seems to exist in the blazar community, the communication effort to alert it on our requirements must be expanded.
In the session, Paolo Giommi will present the recent MW campaign on 3C454.3. During the VRVS meeting, he flashed the preliminary SED they have obtained on this source. Large flux changes are observed in the X-ray band while the

flux in the optical remains essentially steady. This exemple is a prime illustration of the power of simultaneous measurements.

Interface with other groups

There several groups with which the interfaces must be worked out, so that the mutual needs and the division of tasks are clearly established. It is proposedto have a series of common meetings to allow all members to express their views, and to identify a few people belonging to both groups serving as correspondents. Greg, Roger and Gino have agreed to serve this duty for the MW coordination group, Roger and Paolo for the catalog group, Julie, Benoit for the calibration & analysis group. This short, still incomplete list should be updated shortly.

Report on the group activity

Are we enough? It seems not. We are 38 group members and the task is gigantic, given the several thousands of expected blazars sources.
The updated list of planned papers include extensive studies of bright sources with simultaneous MW data. The list also includes papers on the VLBA Survey of GLAST Blazars by the VIPS (VLBA Imaging and Polarisation Survey) team.

Action items

The updated list is given on the last slide of the presentation. A few new oneshave been added, including the definition of the prescription for blazar identification and establishing the feasibility of different studies as a function of source flux, index....

Simulations of Blazar Survey

Paolo Giommi has briefly presented preliminary results his simulations on blazar Survey, based on a radio luminosity function extrapolated to other bands using a SSC model and observed distributions. The results show about 1000 RASS-NVSS sources as gamma-ray emitters above GLAST sensitivity. In the case of a radio flux-limited survey with a limit at 50mJy, with 24000 sources at galactic latitudes above 15○, about 5000 sources meeting this criterion are predicted.The CLASS survey with a limit at 65 mJy (11000 sources) at 4.8 GHz could be used for this purpose. The gamma-ray flux shows little sensitivity on the X-ray flux in the simulation. A similar conclusion has been reached by Romani et al. when defining GLAST source candidates with the Figure of Merit.