

# GLAST LAT Collaboration Meeting: Workshop on Science Planning

August 1-2, 2001, Stanford University

Dear Collaboration Members and Invited Participants:

By now, I hope that all of you have received the first announcement of the GLAST LAT Collaboration Meeting to be held at Stanford University on August 1-2, 2001. The meeting will be devoted almost entirely to science discussions and planning. Part of the objective of the meeting is to promote understanding of the big picture about the science objectives of the LAT investigation by all members of the team. This collaboration meeting is not for detailed review of the instrument and status.

To help facilitate the planning of the meeting, we are establishing a Meeting Web Page. Shortly, we will send you the Web address. In the future, information about the meeting agenda (as we fill in details) will be posted there as well as a listing of suggested accommodations near Stanford University. Even if you have already responded, please go to the Web page and fill in the requested meeting registration information, particularly if you want to receive future mailings about the meeting.

To help cover expenses associated with the meeting (coffee breaks, etc.) there will be a meeting registration fee of \$50. This can be paid at the meeting.

Dana Volponi, administrative associate with the Stanford Physics Department and the Center for Space Science and Astrophysics, will be coordinating the logistics for the meeting. If you have particular questions that you do not find answers to on the Web page, Dana can be contacted at [danav@stanford.edu](mailto:danav@stanford.edu).

Below is the preliminary agenda for the meeting. The science working groups for the meeting will be organized by the organizers listed below. The role of the lead organizers is to help define what each working group will accomplish during the next year and organize the work. I expect that some of the working group organizers may change after a year.

The lead organizers will also help me to keep the work among the various groups coordinated and provide inputs to the planning of the science analysis software tools that will support the collaboration's science investigation. If you have interests or want to contribute in one of the areas listed, please directly contact the lead organizer of the appropriate working group.

Finally, we are arranging for a Surprise Invited Lecturer to give a lecture at the collaboration meeting on a topic that should be of broad scientific interest.

Regards,

Peter Michelson

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## GLAST LAT Meeting Working Groups

### I. Working Group I: Extended Sources and Diffuse Radiation

Organizers: S. Digel, A. Strong, Y. Fukazawa

- (1) Galactic Diffuse Radiation and Emission from Normal Galaxies
- (2) Gamma-ray Emission from Molecular Clouds
- (4) Gamma-ray Emission from Plerions
- (5) Cosmic Ray Acceleration and Gamma-ray Emission from SNR shells
- (6) High-Energy Emission from Galaxy Clusters

### II. Working Group II: Galactic Sources and Unidentified Sources

Organizers: I. Grenier, N. Gehrels, P. Caraveo, D. Thompson, P. Nolan

- (7) Particle Acceleration and Gamma-ray Emission in Pulsars
- (8) High-Energy Emission from Neutron Stars in Binary Systems
- (12) Unidentified Sources: Population Studies
- (13) Unidentified Sources: Radio/optical/X-ray identifications
- (14) High-Energy Emission from Stellar-Mass Galactic Black Hole Candidates
- (15) The Galactic Center

### III. Working Group III: Extragalactic Sources

Organizers: E. Grove, R. Johnson, R. Hartman, T. Kamae

- (3) Extragalactic Diffuse Radiation and LogN-LogS of Extragalactic Sources
- (9) Gamma-ray Emission from Blazar AGNS; mechanisms, multiwavelength spectral studies, time variability
- (10) Luminosity Evolution of AGN Blazars and Spectral Cutoffs: Population and EBL Studies
- (11) High-Energy Emission from Seyfert galaxies and Radio galaxies

### IV. Working Group IV: Searches for New Physics

Organizers: E. Bloom, Per Carlson, A. Morselli

- (16) Spectral Searches for Dark Matter – E. Bloom
- (17) Search for Signatures of Quantum Gravity -
- (18) Search for Primordial Black Hole Evaporation -

### V. Working Group V: GRBs and Solar Flares

Organizers: J. Norris, G. Barbiellini, R. Svensson

- (19) Gamma-Ray Bursts: Testing emission models
- (20) Gamma-Ray Bursts: Afterglows and Multiwavelength Observations
- (21) Solar Flares

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## Tentative Agenda

### Day 1: August 1, 2001

- 8:30 am Overview, purpose of meeting, project status, review of LAT  
Science Investigation from flight proposal..... P. Michelson 45'
- 9:15 am Status of instrument development..... S. Ritz 45'
- 10:00 am Balloon flight report ..... D. Thompson, et al 15'
- 10:15 am *break*
- 10:30 am Software support for science preparation..... R. Dubois/S. Digel 30'
- 11:00 am Overview Talks on Science (organized by Working Groups)
- 11:00 am Working Group I Overview ..... S. Digel, et al.
- 11:45 am Working Group V Overview ..... J. Norris, et al.
- 12:30 pm *Lunch*
- 1:45 pm Working Group II Overview ..... I. Grenier, et al
- 2:45 pm Working Group III Overview ..... E. Grove, et al.
- 3:45 pm *Break*
- 4:00 pm Working Group IV Overview ..... E. Bloom, et al.
- 4:45 pm TBD Science Talk ..... Surprise Speaker
- 5:45 pm Adjourn for the day
- 6:00 pm wine and cheese reception

### Day 2: August 2, 2001

- 8:30 am breakout sessions for each of the Working Groups (various rooms)
- Noon Lunch
- 1:15 pm Reports from Working Groups (room 370, Bldg 370)  
nominally 25 minutes each
- 4:00 pm Wrap-up of Meeting ..... P. Michelson

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## GLAST Science Topics List

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4. Gamma-ray Emission from Plerions
5. Cosmic Ray Acceleration and Gamma-ray Emission from SNR shells
6. High-Energy Emission from Galaxy Clusters
7. Particle Acceleration and Gamma-ray Emission in Pulsars
8. High-Energy Emission from Neutron Stars in Binary Systems
9. Gamma-ray Emission from Blazar AGNs: Emission mechanisms, multiwavelength spectral studies and time variability
10. Luminosity Evolution of AGN Blazars and spectral cutoffs: population and EBL studies
11. High-Energy Gamma-ray Emission from Seyfert and Radio Galaxies
12. Unidentified High-Energy Sources: Population Studies
13. Unidentified High-Energy Sources: Radio/Optical/X-ray identifications
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15. The Galactic Center
16. Spectral Searches for Dark Matter
17. Search for Signatures of Quantum Gravity
18. Search for Primordial Black Hole Evaporation
19. Gamma-Ray Bursts: Testing Emission Models
20. Gamma-ray Bursts: Afterglows and Multiwavelength Observations
21. Solar Flares