

## GLAST SWG Telecon **DRAFT** Minutes

Thursday, October 19, 2006

### Attended:

David Band  
Ronaldo Bellazzini  
Elliott Bloom  
Lynn Cominsky  
Chuck Dermer  
Brenda Dingus  
Neil Gehrels  
Kevin Grady  
Isabelle, Grenier  
Rick Harnden  
Neil Johnson  
Tune Kamae

Don Kniffen  
Giselher Lichti  
Chip Meegan  
Julie McEnery  
Peter Michelson  
Jonathan Ormes  
Martin Pohl  
Steve Ritz  
Chris Shrader  
Dave Thompson  
Stephen Thorsett

Steve welcomed everyone.

Minutes from the July telecom were sent out this morning. If there are no comments, we will accept them as written.

### **Rick Harnden - NASA HQ:**

- Re-baseline review has held yesterday. Kevin did a fantastic job with the presentation and has done a great job with the project.
- Received the budget and schedule reserves requested.
- Launch will be sometime in Nov. '07; but, Oct. 7 is the launch date scheduled which allows no float time. If problems are resolved quickly, it's possible to still make the Oct. launch.

### **Kevin Grady - Mission Update:**

- Observatory integration is in full force now.
- LAT integration next week; By Christmas all integration should be complete except for the solar arrays.
- Hold has been lifted on delta 2 heavy mission; first flight is scheduled in the summer of '07. GLAST is scheduled second.

- Re-baseline review was held yesterday and went very well; launch is scheduled for no later than Nov. '07. Very aggressive schedule and will work toward the Oct. 7 slot.
- Thanks to everyone for their hard work.
- Pre-environmental review will take place the first or second week of the new year.

#### **Peter Michelson - LAT:**

- LAT integration - working on finalizing flight software issues. Neil Johnson - Spectrum Astro is testing software and working on tracking down the software problem, should be completed by Dec.
- Successful LAT meeting in Stockholm in August.
- Steve R - Beam test at CERN completed and very successful. Heavy ion testing during November.

#### **Chip Meegan and Giseller Lichti - GBM:**

- Chip - GBM is in the middle of mechanical integration; still on track.
- Giseller - High energy testing will occur in about 2 weeks at SLAC - thanks very much to GLAST people at SLAC for their help; nearly finished working on detector model.
- Application for money has been granted in Germany to the end of 2008.

#### **IDS Reports.....**

##### **IDS - Stephen Thorsett:**

- Pulsar coordination moving forward. Attending the weekly LAT pulsar group vrvs meetings and the participation is good.
- Sent out a letter discussing the pulsar timing during the GLAST mission.
- Spoke at NRL and was well received.
- Proposal submitted to Arecibo.
- At Parkes, need support for pulsar observations; need 2 people at a time to do the observing; \$50-\$100k annually. The Parkes program needs to be finalized since the GI program is coming up. Need to focus on this; Isabelle made some excellent suggestions for how to plug students into this effort, and Steve suggested talking again with Dick Manchester to see what his needs are.

### **IDS - Chuck Dermer:**

- I am part of (1) the GLAST LAT Speakers Bureau, with Tune Kamae, Ronaldo Bellazini and Julie McEnery, with the purpose of recruiting appropriate speakers to talk about GLAST and LAT at various meetings; (2) Multiwavelength Blazar Activities, with Dave Thompson, Peter Michelson, and Steve Ritz, where we drafted a letter expressing interest of the GLAST community in radio blazar monitoring; (3) a LAT/HESS Group, with Dave Thompson, Olaf Reimer, Francesco Longo, and Julie McEnery, where we have exchanged wish lists with the HESS team (in particular, Stefan Wagner), to determine what needs to be exchanged between each group in order to maximize science; and (4) a large group of scientists to draft a white paper on the next-generation TeV telescope, which will be motivated in part by the discoveries of GLAST.
- I have recruited a new postdoc, Justin Finke, of Ohio U. Plans to start March, 2007. Focus will be on supernova remnant modeling. I am reactivating my collaboration with Steve Sturmer, who developed a supernova remnant code. The main project is to make maps of diffusing cosmic rays from SNRs to compare with GLAST and ground-based TeV telescopes, and to do a population synthesis study of the gamma ray emissions from cosmic rays throughout the universe. I plan visits from Armen Atoyan and Adrian Melott, and a summer faculty sabbatical by Govind Menon during 2006/2007, which will be supported by my GLAST IDS grant.
- A paper with postdoc Truong Le on GRB statistics in the Swift Era (astro-ph/0610043) was recently submitted to the ApJ. We plan to use this approach to predict the diffuse gamma-ray and neutrino background from GRBs, and to make an independent estimate of the number of GRBs expected to be detected with GLAST. I also posted my Barcelona paper on High-Energy Cosmology (astro-ph/0610195), where I estimate various contributions to the diffuse gamma ray background from star-forming galaxies, clusters of galaxies, GRBs, and blazars. I am also revising an analysis of EGRET data on blazar, leading to predictions of the number of blazars and radio galaxies detected with GLAST, the contributions of unresolved blazars to the diffuse gamma-ray background, and a prediction of hard tails on blazars, possibly due to hadronic emission components.

**IDS - Martin Pohl:**

- We have nearly finished the gamma-ray production matrices that will describe hadronic gamma-ray production in the *GLAST* range and the *IACT* energy range. The advantage of this technique is simplicity and its accounting for gamma-ray production channels other than neutral pions.
- A paper is in the works, in which we also look at the *HESS* spectrum of RX J1713-3946, which we find incompatible with hadrons accelerated at cosmic-ray modified shocks.
- Work on the 3-D structure of gas in the Galaxy is in progress, as is work on modeling small-scale structure in the distribution of cosmic rays in the Galaxy.
- Also progressing is work on defining science and technical option for conducting ground-based gamma-ray astronomy beyond *VERITAS/HESS* and possibly also beyond *GLAST*.

**IDS - Brenda Dingus:**

- Brenda Dingus is working with postdoc Sabrina Casanova who is funded by the NASA IDS grant. They have submitted a paper to *Ap J*, with Bing Zhang, entitled "Constraints on TeV Emission from GRBs from the GeV Extragalactic Diffuse Gamma-Ray Flux" astro-ph/0606706.
- Sabrina is also working with Jim Chiang at SLAC on transforming the EGRET data and exposure into a format useable by *GLAST* software. Sabrina has recently visited SLAC twice to work on this project.
- Brenda has also recently submitted a proposal to NSF to build a sensitive TeV all sky monitor which would enable observations of the highest energy gamma-rays from *GLAST* sources.

**Steve Ritz for Josh Grindlay - GUC Activities:**

- User's Committee continues to meet thru telecons.
- The next face-2-face meeting will be Nov. 16-18, 2006 at Goddard. The first part of the meeting will be beta testing of science tools. The *GUC* will be doing the testing, exposing the *GUC* to the tools. The *IDS's* may participate, too; if so, they should inform the *GSSC* right away. It is important to understand that the data challenges were much more in-depth than the beta test will be.
- Policy and preparation to Guest Investigator program.
- Symposium planning.

### **Steve Ritz and Peter Michelson – Symposium Planning:**

- Have added additional enhancements of important dates to the website. This includes abstract deadline, hotel cutoff, satellite meeting information, etc.
- 2<sup>nd</sup> bulletin to go out soon.
- Registration – about 60 people on the info list so far, more accumulating.
- Investigating opportunity to have a public lecture on Wednesday evening.
- IOC telecom was held several weeks ago. Steve will write up minutes and send them out.

### **Lynn Cominsky – E/PO:**

- The PBS NOVA presentation “Monsters in Milky Way” will debut on Halloween, October 31.
- Shipped boxes of Pop-up book to GSFC, Peter and Chip. Pop-up book will be in the launch kit.
- Working on launch kit design.
- Have a booth at the California Science Teachers Association meeting.
- Working on a Teacher’s W/S to go along with the Symposium; about 20 people usually attend. Limited attendance because it’s hands-on.
- Video taping will be done by GSFC throughout the Symposium.
- Lynn is working on a press plan, etc. for the Symposium.

### **Steve Ritz – Science Performance Review:**

- Had successful LAT, GBM, BWG/SWG reviews; would like to do all 3 SRD tables; inviting Don Kniffen, Wim Hermsen and an additional outside person who is a GRB expert. Original target date was in mid Dec. It will be a SWG review, project people will also be involved, but we need to schedule it soon.
- Suggestion: having it on Friday before Symposium, on Friday 2 February all day, which will reduce travel particularly for people outside the US – discussion followed. General sense that this is better than mid-December. Additional meetings at the Symposium are already being booked:
  - GUC/SWG,
  - LAT and GBM meetings,
  - Users Committee meeting 3-6 on Sunday
  - Saturday is already scheduled for the LAT IFC meeting

**ACTION ITEMS:**

All actions items completed, except:

- Lynn - to send GTN viewgraphs to Dave Thompson.

Adjourned

October 26, 2006