

GLAST SWG Telecon **DRAFT** Minutes

Thursday, May 18, 2006

Attended:

David Band
Elliott Bloom
Patrizia Caraveo
Lynn Cominsky
Chuck Dermer
Brenda Dingus
Neil Gehrels
Kevin Grady
Rick Harnden

Neil Johnson
Don Kniffen
Giselher Lichti
Chip Meegan
Julie McEnery
Peter Michelson
Martin Pohl
Steve Ritz
Chris Shrader

Steve welcomed everyone and reviewed the agenda

Announcements: Chris Shrader was introduced. Chris has joined the SSC and will replace Jay who is leaving in the fall. Neil's roll will also increase in the SSC. Chris brings a lot of experience and talent to the SSC.

NASA HQ - Rick Harnden:

- GLAST is doing beautifully. Support very strong at HQ.
- Budget status review next month at HQ.

Mission Update - Kevin Grady

- Many budget presentations to HQ during the last couple months. Spacecraft schedule is a challenge. HQ is still very supportive of program.
- Very successful Mission Operations review was held in March; ground systems proceeding well.
- All GBM hardware at MSFC is fully integrated. GBM will travel to Phoenix in July.
- The LAT has traveled to NRL.

- Spacecraft - most components have been delivered; solar array is close to critical path, but going well; array drive life tests going well - already at equivalent 4 $\frac{1}{2}$ -5 years orbit life and continuing.
- C&DH - Spectrum Astro is working on the final 4 boards to fabricate; about 1 week away from testing. A number of boards were cracking and have been replaced.
- Schedule - The spacecraft, GBM, and LAT, have experienced some delays and this will impact the critical path; May result in a launch delay of about a month from September 8, 2007; will confirm in late summer. Working closely with HQ.
- Boeing's next delta 2 heavy launch (The DAWN Mission) is due to launch June 2007 with a launch window until Oct.

LAT - Peter Michelson

- The LAT traveled to NRL last week; environmental testing has started; scheduled to ship from NRL to Spectrum Astro in September; Neil Johnson stated that the CPT review is next Thursday.
- Science analysis being worked on for the DC-2 closeout at GSFC, May 31-June 2; Julie stated that the DC-2 is getting an overall view on data and analysis tools and how they work. Going very well.

GBM - Chip Meegan and Giseller Lichti

- In the process of validation testing.
- Completed the EMI test of the complete system; went well; correcting minor problems.
- Thermal Vac - halfway thru the 8 cycles; DPU board resets in cold, working on solution; hope to have completed by Memorial Day.
- Giseller - all the hardware from Germany has been delivered to MSFC.
- Orbit change - will reduce the time that GBM trigger is disabled and reduced the rate of false triggers - 25.4 degrees.

IDS Reports:

Chuck Dermer:

- The microquasar paper on LS 5039 with Markus Boettcher will appear June 1st in the ApJ. There we develop and implement a formalism using a head-on approximation for the Compton cross section for calculating Compton-scattered stellar radiation throughout the Thomson and Klein-

Nishima regime. It is accurate, avoids multiple integrals, and leads to compact semi-analytic expressions. Predictions of orbital periodic variability from LS 5039 are made for *GLAST*. The approach should be very useful for blazar studies, which require the full Compton cross section to compare with *GLAST* observations.

- A paper on short GRBs, written with Armen Atoyan, is published in the *ApJ Letters*. This new model for short GRBs attempts to resolve the question why SGRB X-ray afterglows have similar features as long duration GRBs (in particular, a rapid X-ray decline). I just posted my paper on blazar statistics, submitted to *ApJ*, on astro-ph (astro-ph/0605402). A paper with Peter Becker and Truong Le, which extends the Ramaty-Lee solution stochastic acceleration solution in accretion coronae around black holes (astro-ph/0604504), was just accepted in the *ApJ*.
- Postdoc Truong Le and summer students Jeremy Holmes (FIT) and Hannah Krug (Yale) are supported by the *GLAST* IDS grant, as well as visits by Armen Atoyan (Concordia U.). I am also part of the speaker's bureau and the *GLAST*/HESS study group.

Brenda Dingus:

- Last week hosted meeting at Santa Fe on the next-generation, large, ground-based VHE gamma-ray facility, 55 attendees. Preparing to write white paper.

Martin Pohl:

- A paper lead by my postdoc Jacek Niemiec suggests a low efficiency of relativistic shock acceleration, which is commonly assumed to operate in AGN and GRB. Using a realistic model of magnetic turbulence one finds that very few particles can return to the shock for subsequent cycles, so basically only one cycle is performed.
- I would like to draw the attention to a White Paper on the future of ground-based gamma-ray astronomy that the APS Division of Astrophysics may sponsor. If green light comes from DAP, we would also contact members of the space-based gamma-ray community for counsel and contributions.

User's Committee Activities - Steve Ritz (Josh on travel)

- Steve to send around URL for minutes.

- The GUC has met twice a year, but now will increase their face-to-face meetings; the next meeting in November will include Beta testing of tools.

Symposium Planning - Steve Ritz and Peter Michelson

- Have formed the international science committee.
- This first Symposium will be held February 5-8, 2007, just prior to proposals and 7 months prior to launch; the second symposium will be held approximately 1 year after launch.
- This first Symposium will be held at Stanford University; expecting 250-400 participants.
- First bulletin to be released soon; already in the HEAD newsletter; e-mail list a priority, Giselher has e-mail list from last meeting, HEASARC also has list; Particle people have their own list;
- Also setting up a website.
- Lynn has consented to do the press.
- Teacher's workshop - needs to be a full day and held on a weekend; could be held on Sunday prior to the symposium or not at all. Decided for now not to have one.
- One set of parallel sessions on Tuesday afternoon. Thursday PM is open for satellite meetings or just adjourn.
- Posters will be up the whole meeting. Parallel sessions will be held in the poster room.
- SSC booth will be staffed throughout meeting. Jonathan suggested having preview of science tools.
- Proceedings - the GUC has a strong feeling for printed proceedings. Would like web access to proceedings also.
- Looking into a range of hotels with a range of rates.
- Registration will be approximately \$300.00, but may go up if proceedings are published.
- Banquet on Tuesday at the University, \$60.00; quite pricey - SWG suggested that having a cash bar instead of including drinks in the ticket price will lower the cost.
- There is adequate parking available.
- Planetarium Show will be playing at Chabot in Oakland (1 hour away). Show is 20 minutes long and has to be projected on a dome. Could ask if anyone is interested for Thursday evening.

Other meetings

- Upcoming meetings that will have GLAST presence: San Servolo meeting for GRB's special GLAST evening session, Special session at the HEAD meeting; have requested a special session at the AAS meeting with Roger Blandford along with panel discussion. Patrizia suggested attending the International Astronomy Union in Prague in August.

EPO - Lynn Cominsky

- Pop-up book finally at the printers.
- Super Nova is in need of technical review.
- GLAST race card game complete.
- Mission posters
- Have been doing Educators Conference.
- Planetarium show is being leased by Baton Rouge next.
- Nova show on PBS in September.
- Black Hole brochure in Spanish is at printers.
- Education portfolio for HQ describes all programs.
- Several weeks before the LAT was being shipped to NRL, press releases were being done. Finally 3 days after the LAT arrived at NRL, the press releases were printed.

ACTION ITEMS - Steve

- Giseller - forward INTEGRAL e-mail list to Steve.
- Peter - reduce banquet cost, and check into overflow room.
- Lynn - check into the size of Chabot
- Patricia - URL for Prague meeting.

TELECONS

Steve proposed that the June 15 and August 17 telecons be combined and just have one on July 27th. All agreed.

After the July telecon, there will be one in October.

Meeting adjourned.

revised: 6/19/2006