

DRAFT Minutes of the FGST/GLAST International Finance Committee Meeting 22 – 23 September 2008

The International Finance Committee met at SLAC.

In Attendance:

Members:

Chair – Steve Kahn
France – IN2P3: Stavros Katsanevas
France – CEA: Pierre-Olivier Lagage
Italy – ASI: Elisabetta Cavazutti
Italy – INFN: Benedetto D’ettorre
Japan – Hiroshima: Takashi Ohsugi
Sweden – KTH: Per Carlson
USA – DOE: Kathy Turner
USA – NASA: Ilana Harrus
USA – Stanford: Peter Michelson

Staff:

NASA: Julie McEnery, Steve Ritz
Stanford: Nancy Christiansen
SLAC: Rob Cameron, Eduardo do Couto e Silva, Richard Dubois, Harvey Lynch

Minutes 22 – 23 September 2008

Welcome – Persis Drell

No one anticipated that GLAST (now called FGST) would turn on so well and so quickly. The first paper is out less than 3 months after launch. SLAC expresses its thanks to the IFC for its strong support that made this possible. We look forward to a decade of science!

Introduction and Action Items from Previous Meeting – S. Kahn

Welcome to the members of the IFC.

There were no actions from the previous IFC meeting held by telephone.

FGST is working very well, and our focus today is how well the mission is going.

We made an executive decision on how to handle an under-run of the OCF from the previous meeting. In particular, we want to commit \$25 k for Eric Siskind to handle possible anomalies that could arise.

Mission Status – Ilana Harrus / S. Ritz)

http://www.slac.stanford.edu/exp/glast/doc/9_08/IFC-Ritz-Mission-v1.ppt

Steve Ritz sends his regrets for not being able to attend the meeting.

The launch went exactly as specified, and the 60 day checkout went extremely well. There was one anomalous 4-minute event which occurred in which the LAT was shut off on 31 July. We believe that we understand the cause. Eric Siskind has been very helpful.

Science operations officially began 14 August 2008. FGST has been in sky-survey mode, and autonomous re-pointing can begin in October 2008. We are seeing about 1 gamma ray burst per day.

Other missions have experienced reaction-wheel failures. FGST has a redundancy that should deal with this possibility.

Rick Harnden, the Fermi Program Scientist at NASA HQ, will be stepping down in October. We would like to express thanks to him for years of help, and we welcome Ilana Harrus. Other changes are shown on p. 10 of the presentation.

A Fermi User Group (FUG) <http://fermi.gsfc.nasa.gov/ssc/resources/fug/> has been appointed by NASA; see p. 12. S. Kahn took note of the fact that HEP has very little representation in the group.

The expected timeline for the Science Operations is shown on p. 13.

LAT Status – P. Michelson

[http://www.slac.stanford.edu/exp/glast/doc/9_08/Fermi%20status%20SLUO%20meeting%20\(9_08\).ppt](http://www.slac.stanford.edu/exp/glast/doc/9_08/Fermi%20status%20SLUO%20meeting%20(9_08).ppt)

The mission is working very well. In a few days, Fermi confirmed the EGRET pulsars and found new gamma-ray pulsars as well. See p. 11 et seq. of the presentation. FGST observed a high energy gamma-ray burst last week during the collaboration meeting.

There have been some changes in membership, with 8 new members and affiliated scientists. In the past the IFC has ignored the very small numbers of non-members, but some discussion will take place later today for the present situation.

The new Science Analysis Coordinator, Nicola Omodei, begins in January 2009. We wish to thank Julie McEnery for her outstanding work during her tenure.

LAT Analysis Coordinator's Report – J. McEnery

http://www.slac.stanford.edu/exp/glast/doc/9_08/AC_report.ppt

The working groups are active. The roles of the science groups were summarized. They include making preparations for obtaining science results from the LAT and providing fora for LAT people to work together. See p. 2 of the presentation.

The fine performance of the various parts of the LAT was illustrated with examples of the Tracker and Calorimeter.

Catalog work has begun, with even the just 6 days of data. See p. 12 et seq. Multi-wavelength activities have been planned and are under way. This is expected to be an ongoing activity for some time. Two gamma ray bursts have already been seen; see p. 21.

Publications are moving ahead. One paper has been published, and three more mature drafts are ready.

In summary, everything is working smoothly!

ISOC and Flight Software Status – R. Cameron

http://www.slac.stanford.edu/exp/glast/doc/9_08/Cameron-ISOC-IFC22sep2008.ppt

The LAT activation went exceptionally well. This was due to good planning and team effort.

The ISOC is in full operation, and data processing is working well. Science Operations, and the role of the Duty Scientists were described. The day-to-day operations of the LAT is now in the hands of the ISOC.

For a while, there will be a need for sustaining engineering support. This some in-house (SLAC) support as well as external support such as Eric Siskind and Jack Goodman.

The Flight Software is working well, and some improvements are expected. See p. 11 et seq.

Computing – R. Dubois

http://www.slac.stanford.edu/exp/glast/doc/9_08/IFC200809-SAS-v00.pdf

In two words, “It works!” The current state of computing is summarized on p. 4 of the presentation. Things are ok now, but reprocessing will be major demand when needed. This will put new demands on SLAC resources.

Needs for CY 2009 are summarized on p. 7 and 9. In particular, 400 more cores, 250 TB disk, and 275 TB of tape. Some additional resources will be needed in 2010; see p. 8.

Burst and Flare Advocates Report – J. McEnery

http://www.slac.stanford.edu/exp/glast/doc/9_08/BA_FA.ppt

Burst and flare advocates perform an important role in the collaboration.

- Monitor and follow up on changes in the gamma-ray sky
- Routinely monitoring data provides an additional check on high level data quality
- Ensure that time-critical communications: Atel, GCN circulars get out promptly.

The duties and staffing of the “Burst Advocate” were summarized. Need to cover 3 shifts per day. Teams have been assembled, but some people are doing a *lot* of shifts. May not be sustainable with this number of people.

Flare Advocates (sky watchers) follow up on all sources detected by the ASP sky monitor (not just brightly flaring ones). Need about 8 people to cover 1 month.

OCF Budget – P. Michelson and All

http://www.slac.stanford.edu/exp/glast/doc/9_08/IFC%20Budget%20and%20Shares_%20Aug%2008%20cost%20and%20Draft%2009%20budget_IFC%20Version_post%20IFC.pdf

We had an under-run of \$82 k for CY 2007, and we expect an under-run for CY 2008. We expect to need some “sustaining engineering support” from Eric Siskind, which will cost about \$27 k. We shall discuss sustaining engineering further in the March 2009 meeting.

For the future, such under-runs should be used to offset member contributions.

There are four countries not in the accounting. After some discussion it was agreed that once Full Members of the collaboration are appointed, it is advisable for representatives of their funding agencies to join the IFC. It is too late to expect financial contributions for CY 2009, but contributions for CY 2010 and beyond would be expected.

Stavros and Benedetto asked that we discuss in-kind computing contributions at the March meeting.

Round Table – All

Steve R. NASA support for FGST is very strong. NASA is impressed by the effectiveness of the collaboration. The Mission Operations phase is a “level of effort”.

Kathy T. DOE is excited by the launch and commissioning. Dennis Kovar was part of a press conference on the First Light and Naming of the mission. This is a help to OHEP for recognition. No concerns are expected for FGST support.

Benedetto: We are very pleased by the mission, and we express our congratulations to the team. INFN is in a crucial stage, but support for FGST is strong.

Elisabetta: We express our thanks to the team. The great success was no accident. ASI is undergoing major changes in leadership, due to the change in government. The budget for FGST is assured. There is much new interest by Italians in FGST, meaning that the number of affiliated members is increasing. We hope for an increase in full members too.

Pierre: We are very impressed by the performance, and express congratulations to the collaboration. The CEA budget is decreasing a little, but it should not affect FGST.

Takashi: We are very happy with the results from FGST. Budgets in Japan are decreasing, but we expect good support for FGST next year.

Stavros: Congratulations to the collaboration. The overall climate in France is not bright, but not terrible. There is some reorganization taking place in CNRS, and with that pressure for moving research to universities. This may be a problem. The FGST budget for next year looks good. We expect at least 2 specialists in Lyon to be working on FGST data.

Per: We much appreciate the launch and rapid production of physics results. The Stockholm group has grown a little. The funding structure will change, meaning that there will be a new Swedish representative at the next meeting. We expect the financial support for FGST to continue.

Steve K.: FGST has exceeded all expectations; congratulations to all. SLAC has less control of its own fate and how to spend money. FGST is very important to the Lab and has high visibility. The computing model will be changing, because BaBar historically provided the infrastructure. The ramp-down of BaBar will change things. SLAC is trying to build up infrastructure for Atlas, and this will be part of the picture. Major changes can be expected by 2011.

IFC Involvement in Public Data Phase

A discussion ensued from the question that Elisabetta raised about what will happen when the data go public. Will agencies want to withdraw and use the public data instead?

Peter does not expect many people to pull out and work independently. Some things can be done with the public data, but some things really need the cooperative effort of the collaboration. There is specialized software within the collaboration. The simulation is collaboration property. The collaboration as a whole results in higher quality papers.

Stavros cautioned that the “system” tends to reward the autonomous young people, so the exposure may be larger than some people think.

Next Meeting

The next meeting of the IFC will be held in Hiroshima, coincident with or adjacent to the FGST collaboration meeting, which is planned for 2 – 6 March 2009. The exact date and location will be communicated later by e-mail. Later: The decision is 27 – 28 February 2009.