

FSSC News and GI Program Update

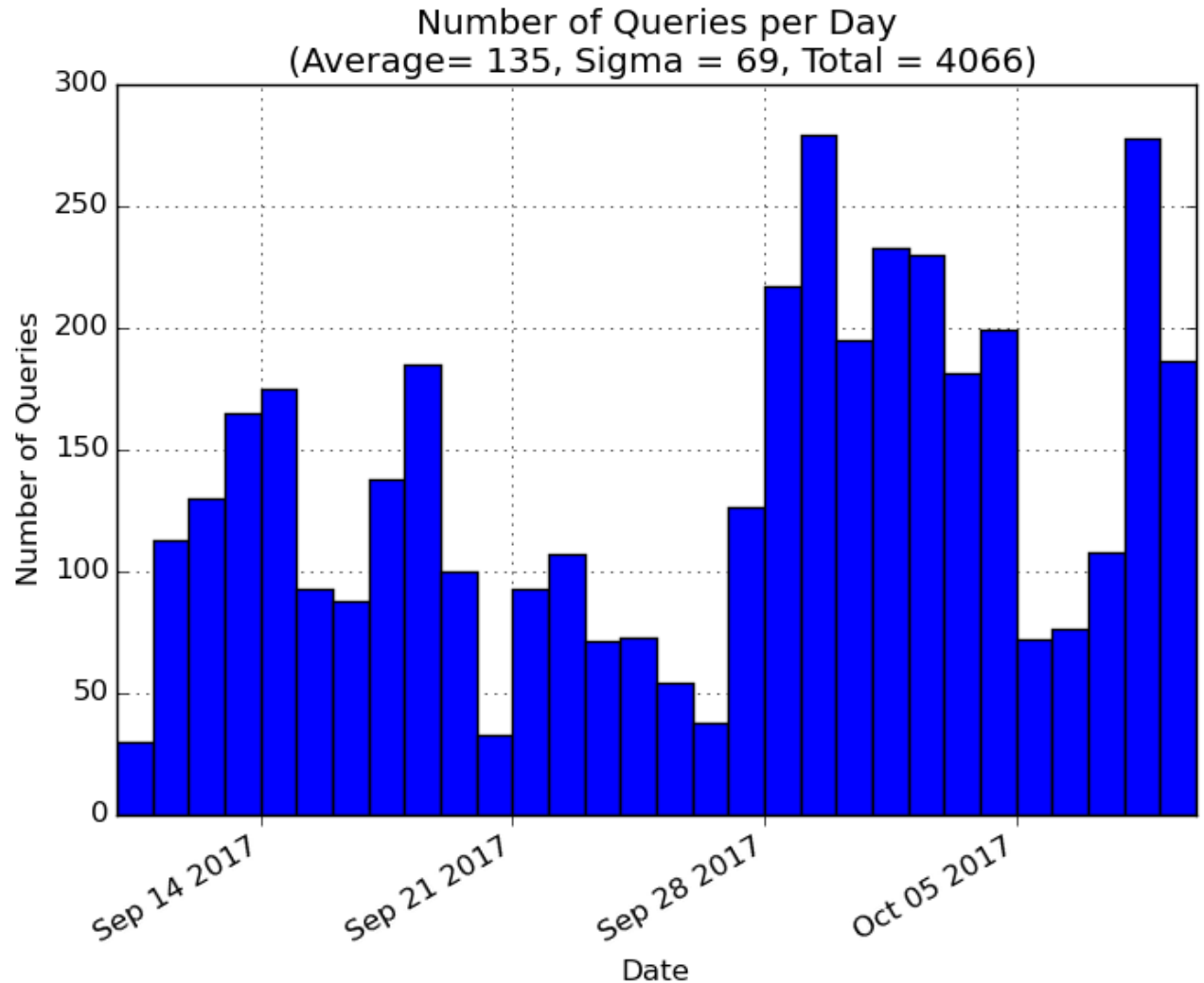
Chris Shrader,
Fermi Science support Center,
NASA/GSFC

- Archive and distribution of LAT, GBM science products
- Maintenance and distribution of analysis SW
- All areas of user support
- GI program management
- Operations support; scheduling & planning
- Support of Fermi EPO

- FSSC Staffing
 - Reduced science staff by 1 FTE
 - Added 2 tech support FTEs
 - Support for transition of DOE activity
- User Support: Cycle 10 started in August
 - Stage-II selections/awards finalized late July
 - 5 months after proposal deadline → improvement over recent years by ~3 months
- Cycle 11: Fermi ROSES text final by next month

- Scheduling and planning support nominal
 - ToOs implemented in the last year for observations of six objects.
 - Crab Nebula, novae, AGN, "mysterious" unnamed transient (2017-06-08)
 - Done w/direct ToO orders & timeline re-plans.
 - New sched/planning team member added

- Community interest continues at a robust level
- FSSC has served ~37 TB of LAT photon data (not counting the weekly files)
- Archive of reprocessed GBM daily TTE files started



- Science tools incremental release forthcoming in near future
 - Newly supported systems include Mac OS Sierra, Ubuntu 16.04, and Ubuntu 16.10
 - Upcoming release will be Science Tools version v11r5p3
- FSSC help desk responds to 1 query per ~1.5 days.
- Additional details in separate presentation

- RC continues to lead collaboration between Fermi scientists and art students at Maryland Institute College of Art.
 - The most recent set of animations were about: merging black holes and gravitational waves, dark matter birth of a pulsar, X-ray mirrors
 - Screening at GSFC on "Take your child to work day", well received by young people.
 - Presented films at several venues, e.g. the "Escape Velocity" science fiction/science convention in DC.

EPO Activities



- Web site "astroanimation.org" is about to go live, includes the animations and background information
- FSSC also supports local EPO activities (“Explore NASA”, Science Jamboree,..) as well as at AAS winter meeting led by EF

Cycle 10 Summary



- 183 proposals received, 43 selected (2* Large, 1 \$0)
 - Flat response *wrt* Cy-8-9
 - ~15% drop *wrt* peak, Cy-5-7
 - 23% approval rate, slight improvement *wrt* Cy 9
- Funding levels:
 - \$2.7M for: \$2.4M new awards after \$0.32M Cy 8-9 obligations
 - Average grant \$57k
 - Dollar over subscription, 4.5X

Cycle 10 Grants



- FY17 awards issued and FY18 are being processed as we speak
- Important point:
 - Improvement in selection rate and $\sim 7\%$ increase in average grant were a result of decrease in obligations associated w/multi-year grants

Received:

183 proposals received (182 new), involving 493 individual investigators and 240 institutions

4 Large, 1 Progress Report

44% Data Analysis, 27% Theory, 23% Correlated Observations, 2% pointed observation requests

30% Extragalactic, 18% Pulsars, 16% GRBs, 12% diffuse/SNRs/stellar

\$10.3M requested, \$55k/yr average (excluding large)

\$2.6M new funds (and 0.32\$M obligation) dollar oversubscription is ~4.5X

Approved:

17 Data Analysis, 9 Theory, 15 Correlated Observations, 2 pointing requests

Joint Programs

(proposals/obs time) / quotas

Requested

/ Total Allocation

NRAO: (18/752) / (450-600 hrs on GBT, VLA & VLBA)

NOAO: (4/214) / (3-5%, various telescopes)

VERITAS: (8/) / (120 hrs)

Arecibo: (1/45) / (300 hrs)

INTEGRAL: (0/0) / (300 ksec)

Approved

NOAO (3 /204)

NRAO (5 /304)

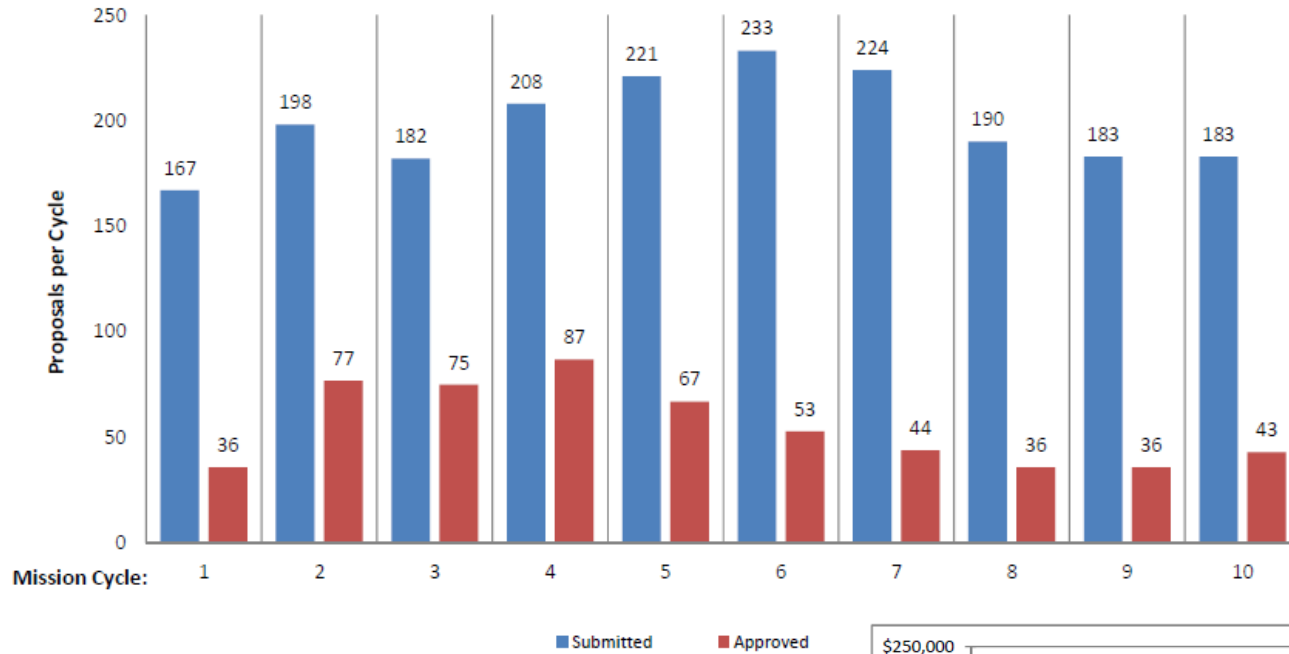
Arecibo (0/0)

VERITAS (1/14)

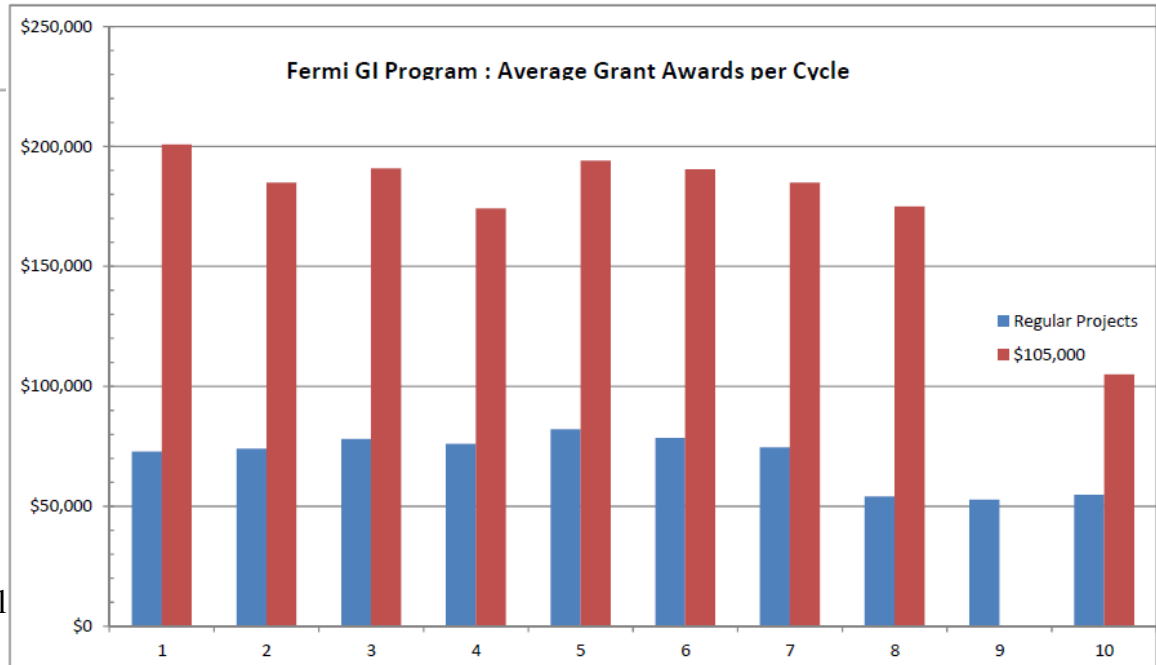
INTEGRAL (0/0)

GI Program History

Fermi GI Proposal History



Fermi GI Program : Average Grant Awards per Cycle



- Status of Arecibo unclear for the near future
 - No JP observations in Cycle 10, but could impact Cycle 11
- GBT has so far continued despite split from NRAO, but uncertain for long term
- INTEGRAL joint program has not proven beneficial
 - ~1 request per year, 0 total selections
- Some concern w/NOAO JP
 - Backdoor for foreign proposers?

- The benefit of Large Projects in the current era of diminishing and uncertain budgets was questioned by some panelists
 - Recurring argument was that one approval costs the same as 9 regular projects
 - Also, the predominance of multi-wave monitoring campaigns and the value of extending beyond 10 years
- Recap, limit number of selections, eliminate or leave as is?

- **Schedule: Feb. 23, 2018 due date**
 - ~early May review, July stage-II awards
- **Budgeting tbd, hopefully program can continue to support 30-40 awards**
- **No significant policy changes anticipated**
 - Unless FUG consensus on Large projects, other issues?

Extra Slides

