

FSSC & Fermi GI Program

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- Archiving and distribution of LAT, GBM science products
- Maintenance and distribution of analysis SW (*Fermitools*)
- All areas of user support
- GI program management
- Operations support; scheduling & planning
- Support of Fermi EPO activities

- *Fermitools* 2.0.0 released in late September 2020.
 - Python3 and ROOT6 support, new IRFs, bug fixes.
- *Fermitools* 2.0.8 released in January 2021 with bug fixes.
 - ~4900 downloads (~55% Linux, 45% MacOS).
 - Patch release imminent
- Docker container for Fermi Summer School updated w/latest *Fermitools* & GBM tools.
 - ~1,800 downloads over the last three years

- Helpdesk:
 - ~12 queries per month to plus ~2-3 per month reported through Github.
- Community outreach: Organized AAS booth for Jan. 21 virtual meeting
 - 78 visitors to the virtual booth
- Some usual activities (e.g. Science Jamboree) curtailed during pandemic
- Proposal workshops
 - AAS splinter session (Jan. 21)
 - Repeated w/online workshop, Feb. 21

- **Archive:**
 - 766 TB of data downloaded over mission lifetime (GBM+LAT). 115 TB in the last year.
 - Switched to serving new spacecraft files (04/20) with SC_VELOCITY column, other changes.
- **Upgraded LAT Data Server:**
 - Server moving to new hardware imminently
 - Final validation and code review underway
 - Significant performance improvement
 - Facilitates addition of more filtering options at download stage

- Regular weekly timeline package deliveries to FOT
- Continued support of LAT planning and scheduling, L1 pipeline monitoring
- Working with SLAC and FOT on revised SAA model
 - LAT SAA polygon reduction which will increase LAT live time
 - Minor modifications to our SW to incorporate revised SAA models

- Cycle-14 proposal submission deadline was delayed from Feb. 19 to March 1, 2021, due to the extreme weather event in Texas
- 87 proposals submitted, processed at FSSC
- Virtual review conducted Apr. 26-28
 - 36 selections announced May 21, 2021
 - Includes one large project, one data-only project
- Stage-II process completed by mid July
- Grant administration ongoing
 - Cycle 14 began 8/13/21

- Response to proposal call decreased *wrt* Cycle13 but comparable to Cycle12
- Selection rate of 40%, slight uptick from Cycle-13 but much better than in some years past
 - Cycles 5-10 average was 22%
- This selection rate is roughly consistent with the average for NASA GO programs (as tabulated for 2019 NASA AAS town hall)

Cycle-14 Quick Statistics

87 proposals received, involving 277 individual investigators from 145 institutions and 23 countries includes: 2 Large project requests

35 selections, 34 grants awarded
\$7.2M requested, \$3.0M awarded, \$75k/yr average grant
Note: \$3.0M also covers \$0.15M Cy-13 obligation

oversubscription is ~2.6X (or ~41% selection rate)

Joint programs (proposals/obstime) / quotas

Requested (Prop/Hrs)/ Total Allocation

NRAO: (7/310) / (450-600 hrs on GBT, VLA & VLBA)
NOAO: (8/380) / (3-5% for various telescopes)
VERITAS: (1/536) / (120 hrs)
INTEGRAL:(1/) / (250 ksec)
TESS: (1/38) / (33 hrs)

Awarded:

36 Programs (35 grants)
1 Large Project (Blazar VLBA monitoring)

\$2.85M (+ \$0.15M obligations)

NOAO: 2 / 250 hrs

NRAO: 4 / 160 (3 VLA/VLBA, 1 GBT)

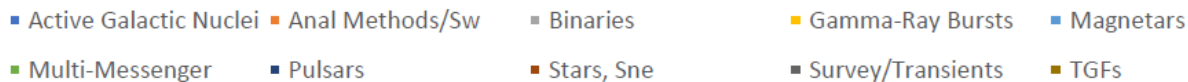
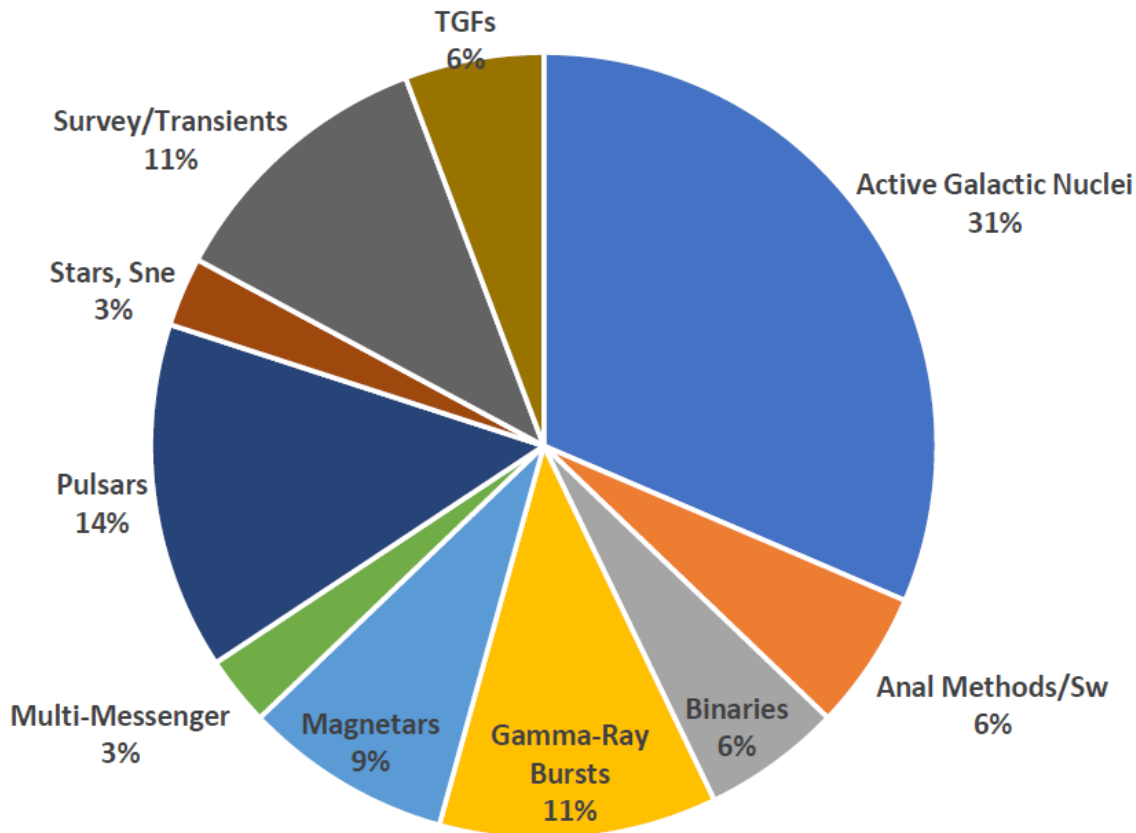
INTEGRAL: 1/250ksec

VERITAS: 0/0

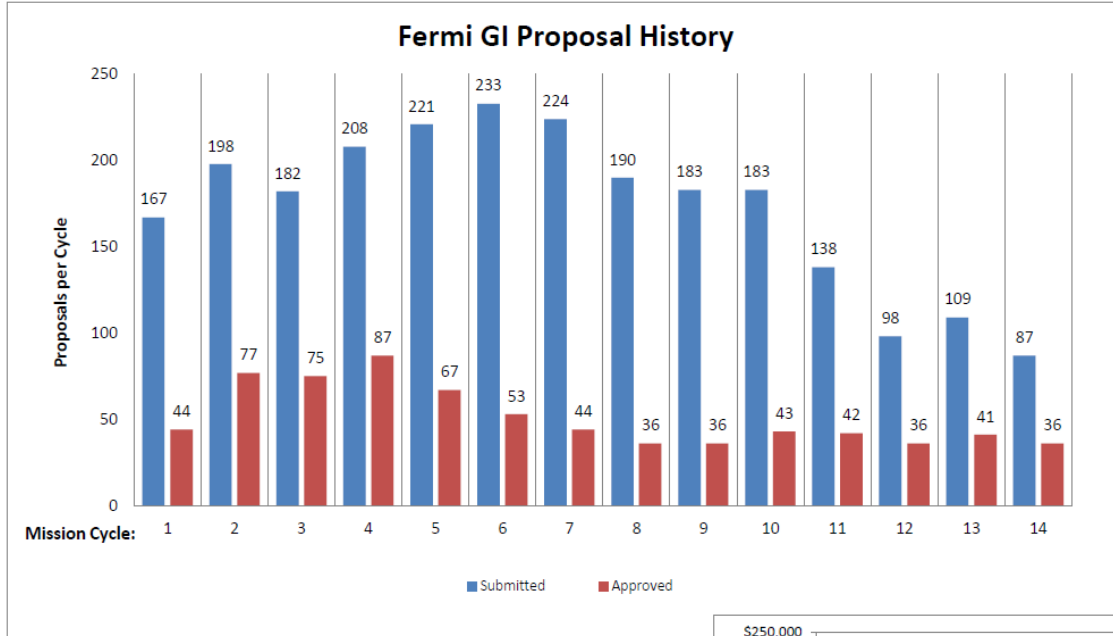
TESS: 0/0

Topical Distribution

(Selected Proposals)

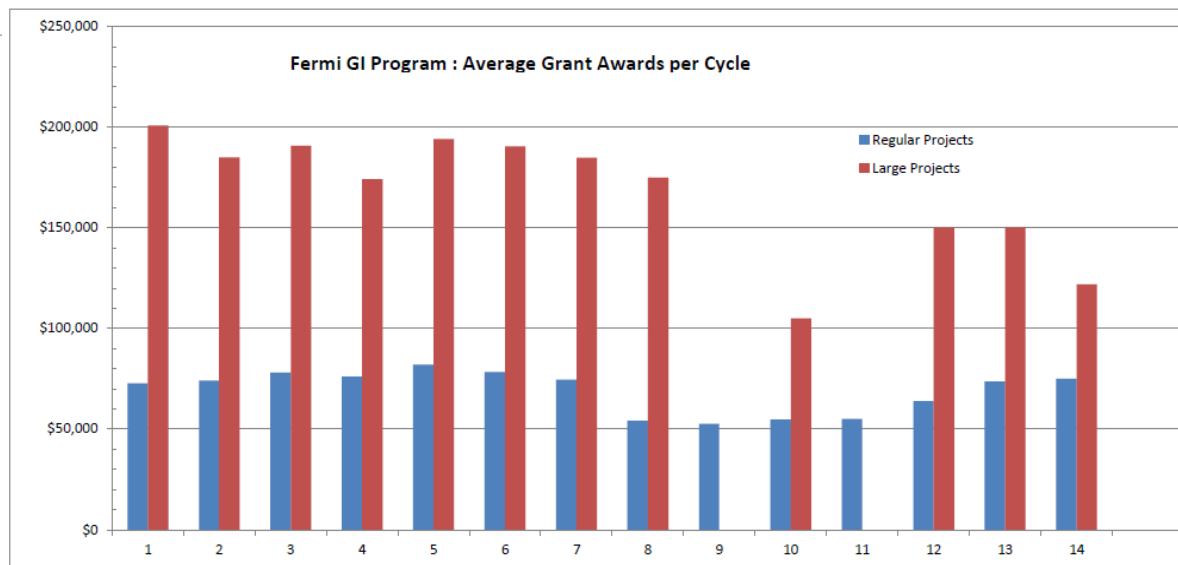


GI Program History



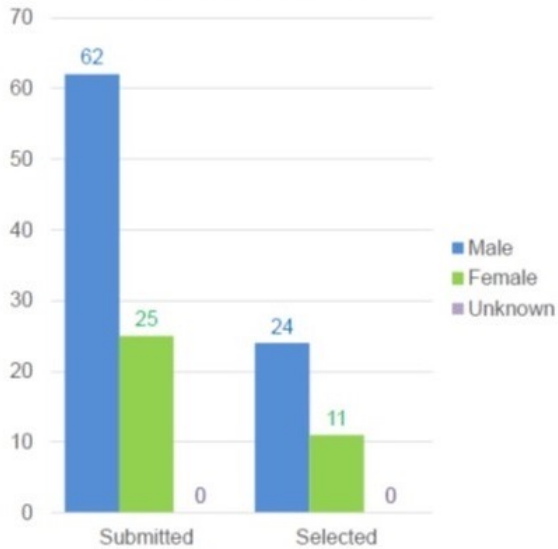
Selection rate
~40%, slightly
higher than that of
overall NASA GO
program average.

Grant level flat since
Cycle-13. 15%
increase in Cy12->13
grant level as result
of FUG 2018
recommendation

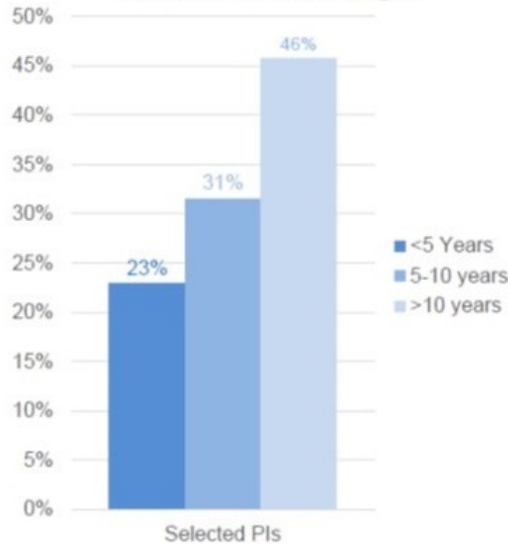


Diversity, Seniority Balance

PI Inferred Genders

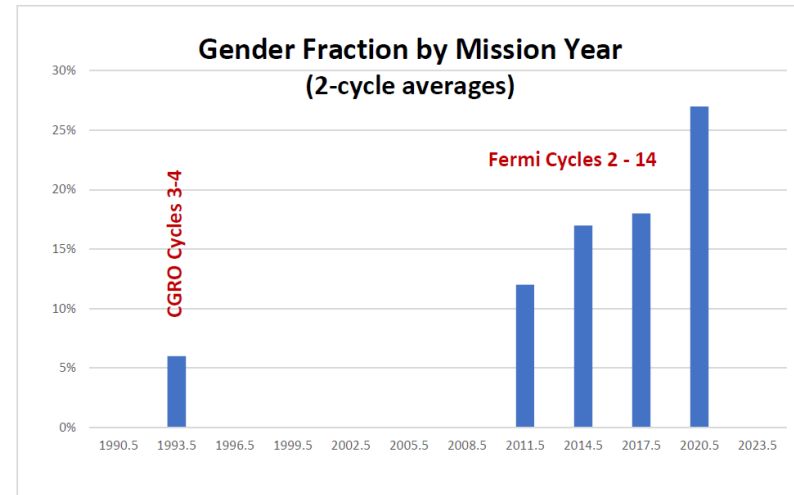
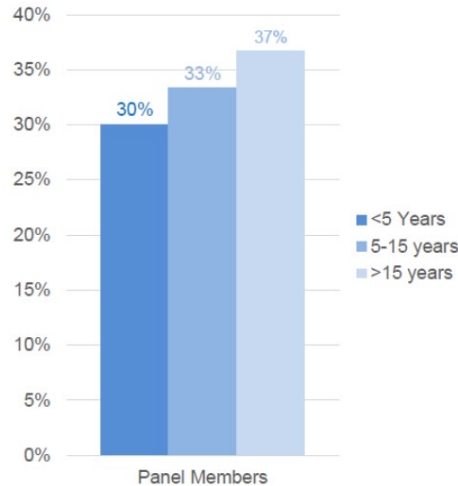
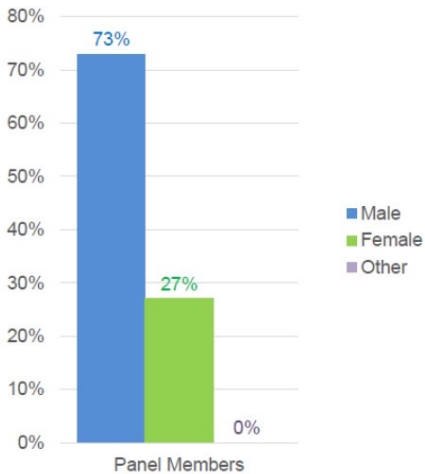


Selected PIs Career Stages



To the extent that gender is a viable proxy for more general DEI Fermi program is strong.

Also strong in terms of early-career scientist representation (w/ caveats). Gamma-ray astronomy gender fraction has improved w/time.



- No significant issues occurred implementing Cycle-14 (first ever) DAPR process
 - Very few noncompliance issues identified
 - Several rather blatant cases were identified prior to the review and sent to over NASA HQ for guidance
 - Lenient approach was advocated for first time DAPRs → no disqualifications
- NASA requires “levelers” to be present in each panel to discourage reviewer discussion of proposer’s identities
 - No such issues occurred
 - As discussed at FUG 2020 there were inevitable cases where PIs could be clearly identified, but reviewer self discipline prevailed

- Schedule: Feb. 17, 2022, proposal due date
 - ~late April review, virtual or F2F? (*tbd*)
 - July/August stage-II awards
- Budgeting; hope to continue selecting 30-40 programs
- No significant policy changes anticipated
 - Dual-anonymous procedures familiar by now
 - Multi-year Large Projects solicited as usual but disclaimer noting outyear dependence on SR22

- Two proposer workshops held; 1/20 AAS splinter and one ~2 weeks prior to submission deadline
- Light-curve repository updated
- Implemented TESS joint program (NICER project declined)
- Solicit GI feedback regarding possible EPO inputs (this was actually already in place)
- Several AIs were vague(?) or open ended

Thanks for your attention! Questions, Comments?