

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
- Support spacecraft & LAT instrument operations, scheduling & planning
- Support of Fermi EPO activities

- *Fermitools 2.2.0* was released in June 2022
 - 662+49 MacOS (Intel + ARM) downloads, 1465 Linux downloads
 - 67% Linux downloads
- Docker container has about 3K downloads in total. About 1k in the last year.
- Another patch release is in the works
- Longer term plan is underway to improve the performance (e.g., speed and memory usage) of some of the tools.

- Helpdesk:
 - ~12 queries per month to plus ~2-3 per month reported through Github.
- Community outreach: Organized AAS booth for Jan. 23 meeting
- Some usual activities (e.g., Science Jamboree) curtailed since the start of the pandemic
- Proposal workshops
 - Planned for January 24, 2023, ~1 month prior to proposal deadline
 - Advertised in HEAD Newsletter

- **Archive:**
 - 899 TB of data downloaded over mission lifetime (GBM+LAT). 120 TB in the last year.
 - The LAT team delivered 1.5 billion photons to the FSSC as of 2022-02-28.
- **Upgraded LAT Data Server:**
 - New data server went live on 2022-03-14. No major issues. It has been very stable.
 - Significant performance improvement
 - Facilitates addition of more filtering options at download stage

- Weekly timeline package deliveries to FOT
- Continued support of LAT planning and scheduling, L1 pipeline monitoring
- FSSC participation in orbit raise discussions:
 - FSSC will schedule observations based on the expected orbit changes, then evaluate and potentially reschedule after each burn.
 - The LAT schedule will also be evaluated for SAA passage times.

- Cycle-15 proposals reviewed in April 2022, selections in May, cycle initiated on 8/3/2022
 - No issues related to dual-anonymous process
- Response to NRA, selection rate similar to previous several cycles
- Cycle-16 deadline is February 16, 2023
 - Anticipate timeline for selection, implementation to be similar to Cycle 15

Cycle-15

80 proposals received, involving 259 individual investigators from 140 institutions includes: 2 Large project requests

34 selections, 34 grants awarded

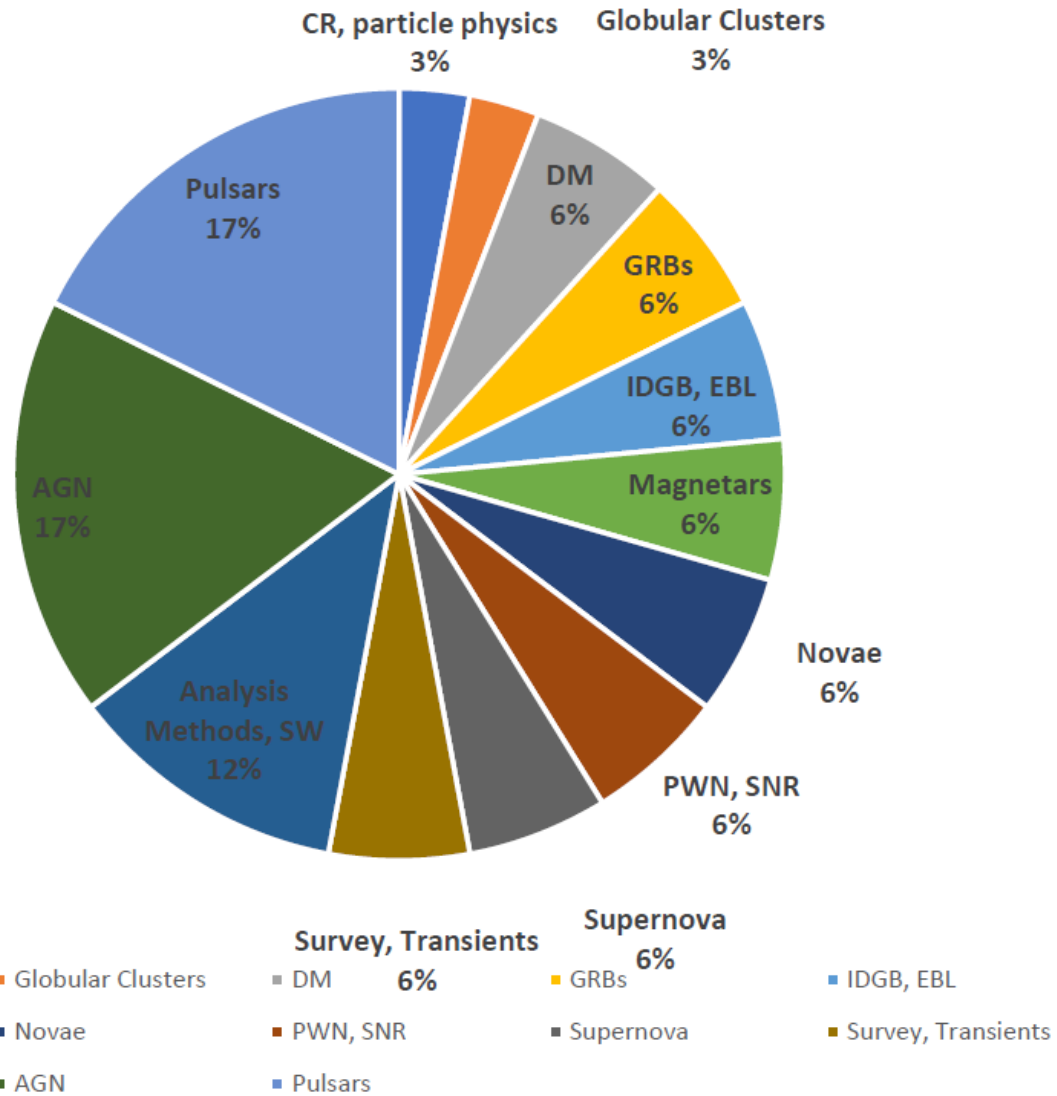
\$6.4M requested, \$2.9M awarded, \$75k/yr average grant

Note: \$2.9M also covers \$0.27M Cy-14 obligation

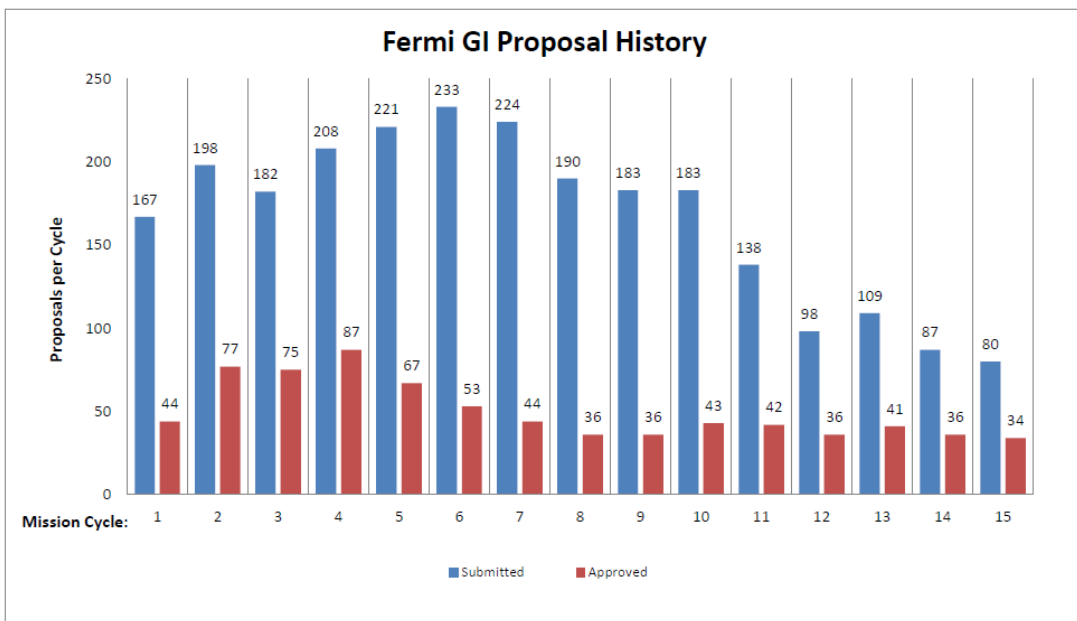
Joint Programs	Program	# Submitted	# Selected
	NRAO	7	4
	NOIRlab	6	1
	INTEGRAL	0	0
	TESS	1	0
	VERITAS	5	1

Topical Breakdown (Cycle-15 Selected Proposals)

Programmatic breakdown:
 LAT data analysis (44%),
 GBM data analysis (9%),
 Correlated MW observation (32%),
 Theory (15%)

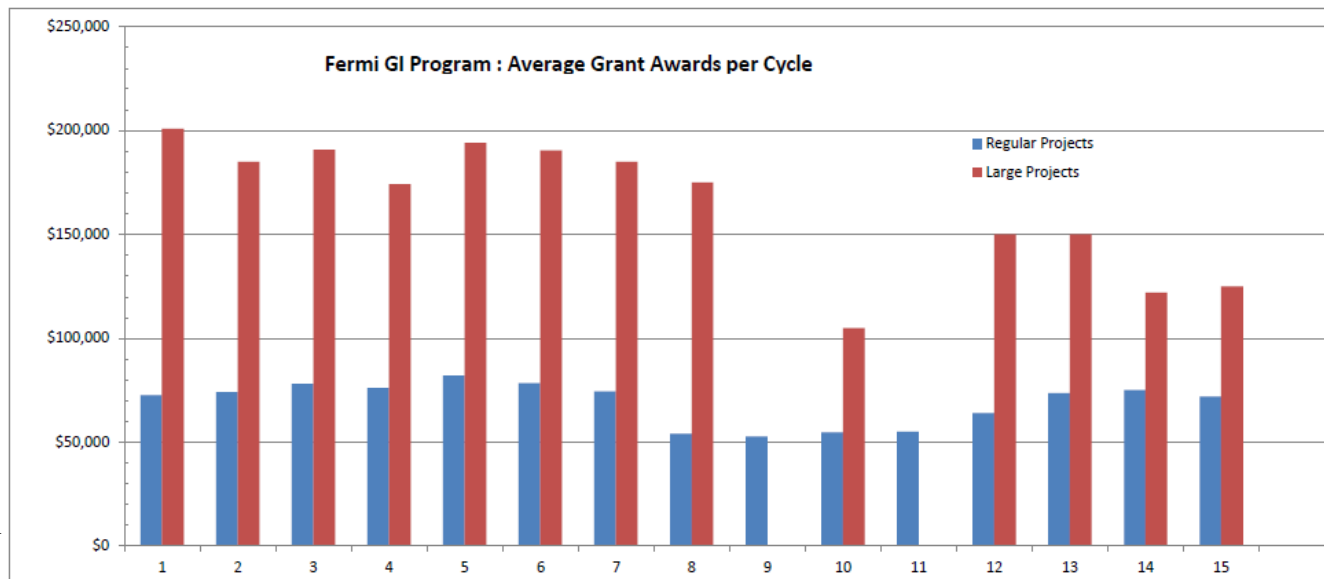


GI Program History



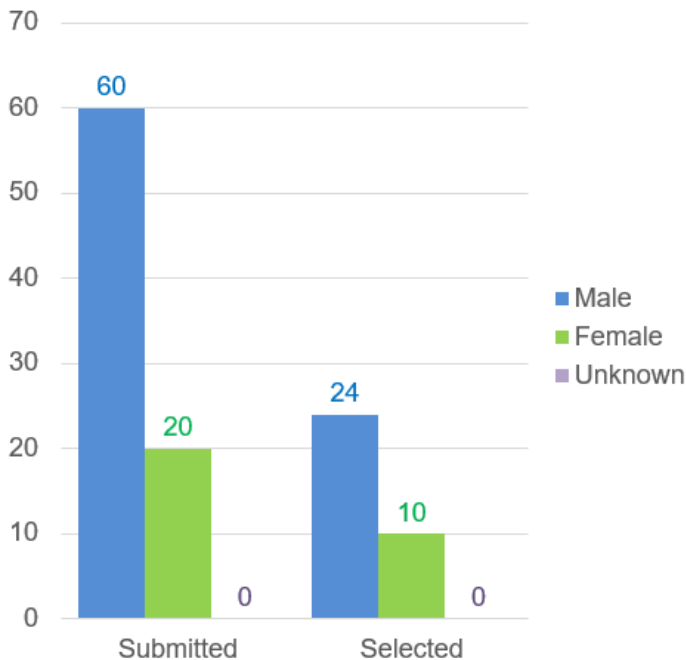
Selection rate
~40%, slightly over
recent years,
~factor of 2
improvement over
Cy-2-10 average

Grant level flat
since Cycle-13.

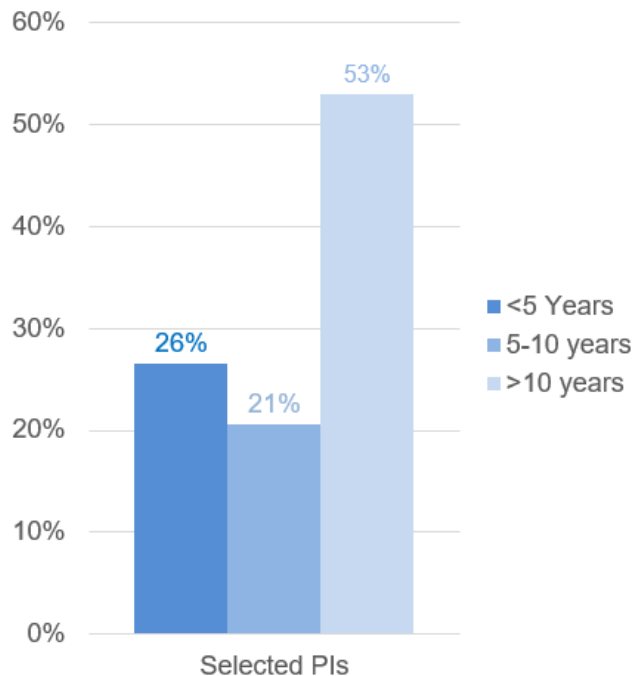


Diversity, Seniority Balance

PI Inferred Genders

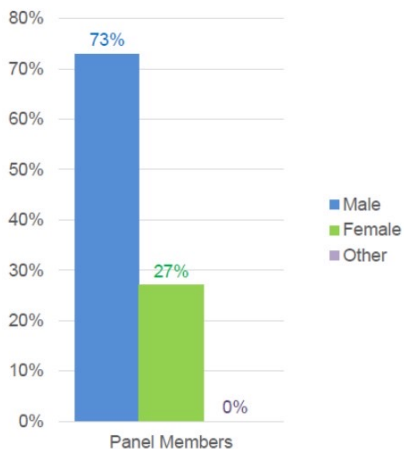


Selected PIs Career Stages

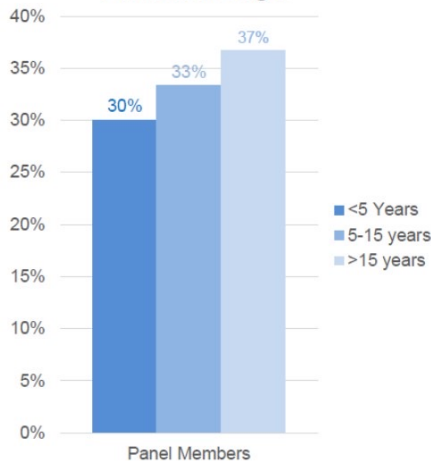


Out of 34 selections:
6 first time PIs, 9 early-career PIs

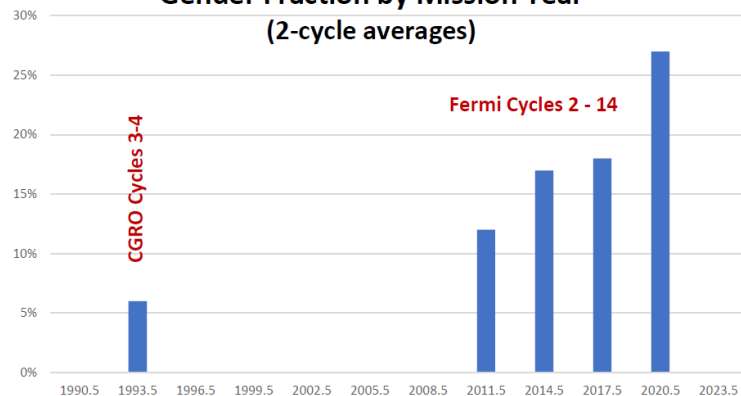
Panel Gender Diversity



Panel Career Stages



Gender Fraction by Mission Year
(2-cycle averages)



Thanks for your attention! Questions, Comments?

- No significant issues occurred implementing Cycle-15 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 discourages 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