

Fermi Users Group



FSSC & Fermi GI Program

Chris Shrader,
Fermi Science support Center,
NASA/GSFC



FSSC Status



- No center access since late March, all activities conducted remotely w/o significant problems
- Regular discussions w/LAT and GBM teams and FOT continue
- Data operations: ingest/archiving has continued essentially uninterrupted.
- Helpdesk, dropped ~50% in March, April. Now back to normal.
- Archive activity remained at normal level suggesting community remains engaged despite cv-19.



FSSC Status



- Major science tools update undergoing final testing; release imminent
 - Python3 support, new IRFs, bug fixes.
- New GBM tools (provided by MSFC) posted.
- New spacecraft (FT2) files release also imminent.
 - SC_VELOCITY columns and improved geodetic latitude/altitude calculation.
- New LAT data server hardware installed
 - Noticeable performance enhancement.
 - Currently installing and testing SW



Program Status



- Cycle-13 proposal submitted February 19, 2020
 - No Cov-19 pandemic yet
- F2F review planned for May 4-6
 - Recruit panelists while Cov-19 situation evolved, complicating that process
 - By mid-March 2020 NASA HQ declares all forthcoming reviews will be virtual
- Virtual review planned & completed on schedule
 - Fermi benefited from TESS, NuStar lessons learned
- Stage-II process completed by end of July
- Grant administration ongoing
 - Cycle 13 began 8/13/20



Cycle 13 Summary



- 109 proposals received, 41 selected (40 grants)
- Response to proposal call increased by 10% wrt Cycle-12
- 38% approval rate, similar to Cycle-12 and an improvement *wrt* past cycles
 - > Cycles 5-10 average was 22%
- This selection rate is ~consistent with the average for NASA GO programs



Cycle 13 Proposal Statistics



Requests

109 proposals received, involving 344 individual investigators from 175 institutions and 25 countries includes: 1 Large project request

41 selections, 40 grants awarded \$8.0M requested, \$3.0M awarded, \$75k/yr average grant request Note: \$3.0M also covers \$0.15M Cy-12 obligation

oversubscription is ~2.7X (or ~37% selection rate)

Joint programs

Requested (Prop/Hrs) Total Allocation

NRAO: (11/300) / (450-600 hrs on GBT, VLA & VLBA)

NOAO: (6/380) / (3-5% for various telescopes)

VERITAS: (0/0) / (120 hrs) INTEGRAL:(0/0) / (250 ksec)

Awarded:

41 Programs (40 grants)
1 Large Project (VLBA Blazar monitoring)

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

Average grant: \$74k

NOAO: 3 / 250 hrs

NRAO: 5 / 160 (4 VLA/VLBA, 1

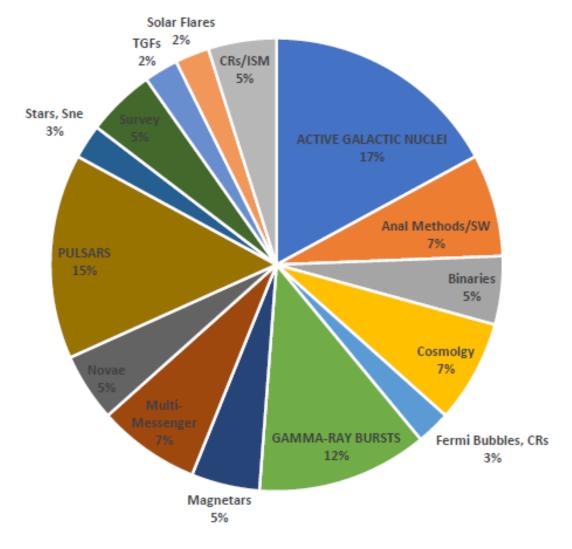
GBT)

INTEGRAL: 0/0 VERITAS: 0/0



Topical Distribution





- Fermi Use
- ACTIVE GALACTIC NUCLEI
 Anal Methods/SW
- GAMMA-RAY BURSTS
 - Magnetars
- Stars, Sne Survey

Binaries

TGFs

- Multi-Messenger
- Cosmolgy

Fermi Bubbles, CRs

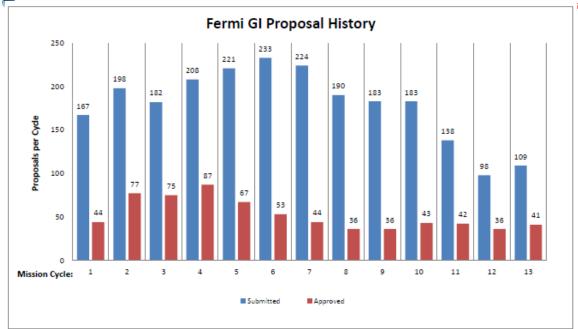
- Novae

- PULSARS
- Solar Flares = CRs/ISM



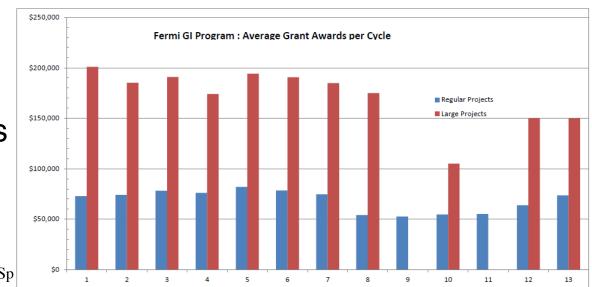
GI Program History





Selection rate ~37%, comparable to that of overall NASA GO programs.

15% increase in grant level as result of last years increase caps (as per FUG recommendation).





Cycle 14



- Schedule: Feb. 19, 2021 proposal due date
 - > ~early May review, virtual? (tbd)
 - July/August stage-II awards
- Budgeting tbd, hopefully program can continue to select 30-40 programs
- No significant policy changes anticipated other than dual-anonymous review process



Dual Anonymous



- Stage-I proposal submission done as before via ARK/RPS
 - Include PI and all co-I info as in the past
 - Names are known to us but hidden from reviewers
 - Numerical references, no "first person" attributions
 - Panelists may not speculate PI, co-I identities (enforcer present)
 - ➤ Include "team expertise" page
- Relaxes certain types of panelists conflicts of interest
- After deliberation and grading names will be revealed
 - A proposal can then be disqualified, but no re-scoring
- Precedent w/NuStar (GSFC managed reviews)
- Some aspects unique to Fermi possibly problematic?
 - > 1-yr data analysis projects often incremental, year-to-year follow-up natural
 - Multi- λ monitoring programs common, often sold in part on legacy

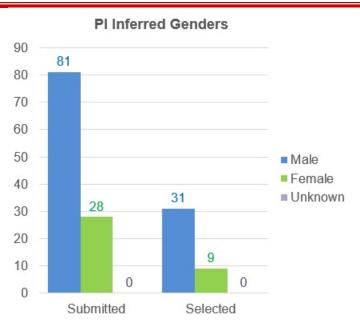
UG 2019 Recommendations/Actions for FSSC Space Telescope

- Use SR-19 augmentation to increase in proposal budget cap to \$80k → implemented
- Motivate community to submit more proposals
 - ➤ 10% increase, but not clear why (no government shutdown helped, plus pre-pandemic deadline)
- Improve panel diversity, expertise
 - Not clear how to do this, but we're arguably at acceptable levels

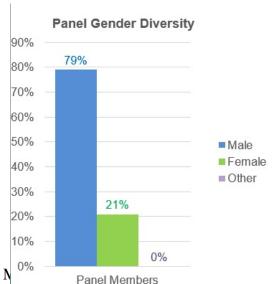


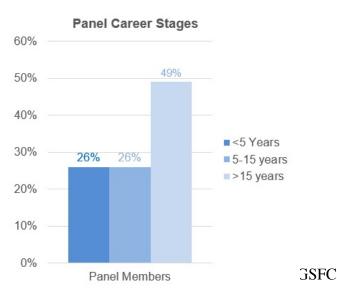
Diversity, Seniority Balance















Thanks for your attention! Questions, Comments?