

#### Fermi Users Group



# FSSC News and GI Program Update

Chris Shrader,
Fermi Science support Center,
NASA/GSFC



# FSSC Functional Overview



- 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 Status, Major Activities



- LAT instrument operations and planning support (Separate report)
- Software releases, helpdesk and archive activity (Separate report)
- User Support: Cycle 11 starts in August
  - Stage-II selections/awards to be finalized imminently
- Cycle 12: Fermi ROSES text changes need to be drafted in September timeframe



## FSSC Status, Major Activities



- Scheduling and planning support
  - Some increased activity level due to solar array issue which necessitate modified survey strategies
  - Separate report
- Future of ToO implementation unclear
  - NRA language needed to reflect this?



#### **EPO** Activities



- FSSC presence at January AAS meetings
- FSSC organized Fermi presence at US Science & Engineering Festival
  - Washington DC convention center, BIG
- Goddard Science Jamboree (last week)
- RC continues to lead collaboration between Fermi scientists and art students at Maryland Institute College of Art.
- 10<sup>th</sup> launch anniversary themes



#### Cycle 11 Summary



- 139 proposals received, 42 selected (41 grants)
- Decreased response (~25%) wrt Cy-8-10). Why?
  - ➤ 4 years of ~80% rejection rate?
  - ➤ Also note that a large fraction (~2/3) of that decrement is from collaboration institutions
- 30% approval rate, improvement wrt last 4 or 5 years
- This rate equals the average for NASA missions but higher than ADAP, ATP



#### Cycle 11 Summary



- Funding levels:
  - > \$2.5M: \$2.3M new awards, \$0.2M C9-10 obligations
  - ➤ Dollar over subscription, 3.5X
  - ➤ Average grant \$55k (~constant over last 4 Cycles)
- Fermi is unique among mission GI programs in that we effectively set the oversubscription level by setting grant caps
  - ➤ Question for For FUG: Are the current caps (\$60k/\$125k) an optimal strategy?



#### Cycle 11 Grants



- FY17 and FY18 awards are being processed as we speak
- Important point:
  - Improvement in selection rate plus ~4% increase in average grant were a result of decrease in obligations associated w/multi-year grants



### Cycle 11 Proposal Statistics



138 proposals received, involving 380 individual investigators and 245 institutions

0 Large, 2 Progress Reports

\$7.9M requested, \$55k/yr average (excluding large)

Assuming \$2.5M new funds (and 0.22\$M obligation) \$ oversubscription is ~3.5X

Joint programs:

Requested / Total Allocation

\_\_\_\_\_

NRAO: (7/416) / (450-600 hrs, GBT, VLA, VLBA)

NOAO: (6/235) / (3-5% for various telescopes)

VERITAS: (1/???) / (120 hrs) Arecibo: (0/0) / (300 hrs) INTEGRAL:(1/200) / (300 ksec)

#### Selected:

-----

42 selections, 41 grants 0 Large projects

#### selected joint programs:

-----

4 NRAO (no GBT)

4 NOAO

0 VERITAS

0 INTEGRAL

0 Arecibo

#### By Topic:

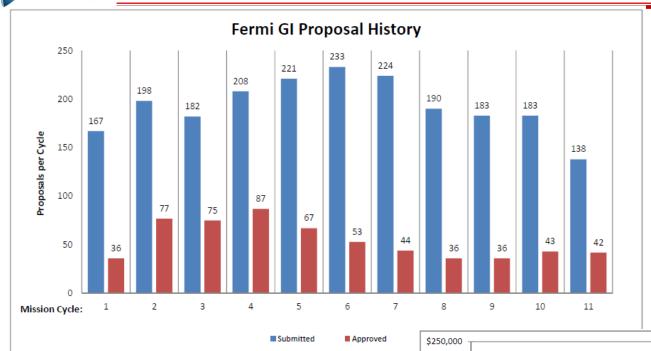
-----

13 Egal, 7 GRB, 4 knova/GRB, 6, Pulsar, 3 SNR, 2 Nova, 2 methods, 1 TGF, 1 CR/solar, 1 Bubbles, 2 survey



#### GI Program History



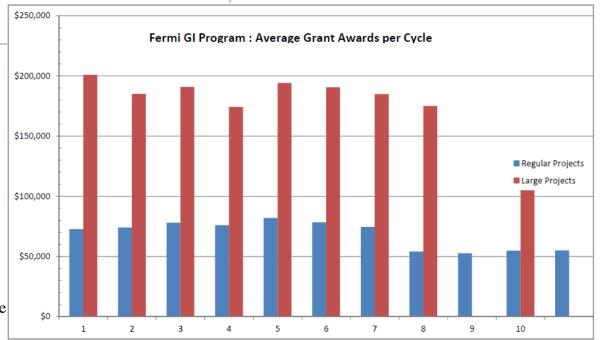


Selection rate has been ~20-30% since Cycle 6.

~constant grant level since Cy8. Typical of NASA GO programs. Scientist at typical institution needs ~3 per year per postdoc.

Fermi Users Group Meeting

NASA Goddard Space





### Joint Observation Programs



- No joint program agreement with new Arecibo management
  - > 2, 1,0 proposals in Cy 9,10 &11 so need to remove from NRA
- GBT has so far continued despite split from NRAO. Long term is unclear.
- Also diminished interest in VERITAS JP (1 request)
- INTEGRAL joint program has not proven beneficial discontinue?



### Cycle 12



- Schedule: Feb. 20,2019 proposal due date
  - > ~early May review, July stage-II awards
- Budgeting tbd, hopefully program can continue to select 30-40 programs
- No significant policy changes anticipated
  - Clarify NRA language on ToOs, joint programs
  - > Unless FUG consensus on caps, other issues?



### Extra Slides





# Peer Evaluation Committee Feedback



- The benefit of Large Projects in the current era of diminishing and uncertain budgets was questioned by some panelists
  - Recurring atgument 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