

GTN SAG Update 230523

APAC

- Congressionally mandated FACA Committee. Legally the only kinds of committees that can make formal recommendations to NASA
 - We have to use careful language in our report that we are not making recommendations (i.e. not “we recommend the launch of GRB monitors on planetary spacecraft” but “the launch of GRB monitors on planetary spacecraft would be beneficial”
- Meetings
 - Spring – March 29-30
 - Summer – June 27-28
 - Fall – October 19-20

Updates from the last APAC Meeting

[APAC.March.2023.draft.docx \(nasa.gov\)](#)

Discussions

- The APAC notes that Fermi (launched in 2008) and Swift (launched in 2004) have been operating longer than their mission lifetime
- The APAC commends the attention given to bolstering infrastructure and space communications in general and to enable TDAMM. However, the APAC found the APD working interpretation of TDAMM to be at once too broad (a mission detecting transients) and too narrow (a mission for prompt electromagnetic followup of ground-based gravitational wave alerts). **The lack of TDAMM prioritization and strategy puts the rich discovery space of this emerging field at risk.**
- **The APAC is concerned about the level of priority and funding given to TDAMM.** The update noted that TDAMM funding, including precursor science, was \$5M in FY23, far below the Astro2020 recommended funding in this decade

Updates from the last APAC Meeting

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Recommendations

- **The APAC recommends that APD investigate consequences and mitigation for aging instruments/missions that support TDAMM, with emphasis on Fermi and Swift.**
- **The APAC recommends higher prioritization of TDAMM.** As a first step, **APAC recommends a reanalysis of APD's current portfolio to determine how to maximize TDAMM capabilities**, such as prioritizing TDAMM in mission selection or enabling TDAMM science through multi-messenger joint analysis tools in TDAMM-specific ADAP opportunities

Nominal Timeline

- The GTN SAG report will go to NASA HQ
 - Readers likely to include Valerie Connaughton, Nino Cucchiara, David Morris
- If we deliver this a few days ahead of the next APAC meeting, Justin Finke can report to APAC that it has been delivered. APAC then can ask for a presentation at the Fall Meeting
 - This would deliver a report that answers some of their recommendations with respect to high energy transients on a particularly rapid timeline (for APAC)
- Aim to submit to HQ by ~June 23rd?

Report Status

1. Executive Summary – to be written last
2. Introduction- to be altered once rest of content is set
3. **Science**
4. **Capability Requirements**
5. **Gamma-ray Transient Network**
6. **Examples – outlined, to be written soon**
7. **Actionable items – outlined, to be written soon**
8. Conclusions – to be written last

Potential Drafting Timeline

- Reasonably mature versions for
 - Sections 3-7 (Science, Requirements, Network, Examples, Action Items) by next Friday, June 2
 - Remaining Sections (Executive Summary, Intro, Conclusions) by ~June 7
- Ask for institutional endorsements in this version
- Final GTN SAG Virtual Meeting around ~June 15
- Remaining items and cleanup for around a week, submit to NASA HQ by ~June 23

Authorship / Signatories / Endorsers

Potential option

- Only include authorship for people who contributed to the content of the manuscript
- Myself, Michael, alphabetical
- Do not worry about endorsements from specific individuals
- Formal endorsement by major institutions?
 - LIGO(/Virgo/KAGRA), IceCube, Fermi, Swift, others?

Discussions

Thoughts on

- **The report deliver deadline**
- **The timeline to get their**
- **Authorship / institutional endorsements**

- Current report content – will run through this next
 - Especially missing items
- Any other business?