

GRANDMA post O3 discussion

Ideas

- Neutrino source follow-up (!!)
- Supernovae (focus on peculiar ones? i.e. SLSNe, relativistic SNe, ...)
- High cadence photometry of “zebra”/atypical sources (a la AT2018Cow: fast rise, slower than GRBs but faster than supernovae, peculiar spectra)
- GRB afterglow ? Localized or poorly localized ? Challenge of observing Fermi GBM GRBs better than Lipunov!!!
- Coordinated observations of transients (simultaneous observations in different bands and/or dense temporal coverage).
- Observe transients detected in VHE (MAGIC/HESS/CTA). For the moment there have been 3 GRBs detected by MAGIC and HESS, there will be a larger number when the 1st CTA telescope joins MAGIC, and this will be in this time scale. There have been HAWC transients but to the Anonymous Lemur, their reality is entirely unclear. They do not seem to be high-energy emission of actual GRBs. Maybe triggers that come from those telescopes (not sure which sources ⇒ For sure GRBs, in fact I think that the only transients detected have been GRBs... Depends on your definition of transient... Something where a VHE telescope can produce an alert)
- Plan for covering 100% of 90% credible region in the next run :) .
- Accept team triggers: If a team is following-up a source of particular interest that can benefit from GRANDMA observations, request data, offering some type of collaboration in the paper.
- Analyse the weaknesses of O3 and prepare the infrastructure to fix them (money and/or manpower).

Objectives

- Maintain the network active
- Maintain the consortium alive
- Keep the good environment with no dispersion of the human energy.
- Science! We need to show science to funding agencies.
- Valorize the observations with publications
- Science target needs to fit the network plus-value
- Task force should do tasks
- **Invest time in pipeline detection and data analysis.--> <3**
- Balancing between risky/opportunity science program and profitable observations
- Think about short term return (for PhD, post-doc values) and long term (with new facilities and FRB area, Neutrino area, LSST area)
- MOU with National Astronomical Research Institute of Thailand (NARIT).

Template of description of “one” science case

1. *Name of your scientific program*
2. *Name teams having some interests*

3. *Description investment in terms of observations, data analysis ?*
4. *Description of the project*
5. *What are the scientific questions you would like to answer ?*
6. *What are the technical requirements needed and "FTE" ?*
7. *What is the GRANDMA organization for this ?*
8. *What is the benefit of preparing for O4 ?*