Monday: scientific analysis of a GRB for publication

- **Test case: a bright GRB detected by all instruments of SVOM (space/ground)**

- **Data available from SVOM:**
  - ECLAIRs & GRM: prompt GRB emission – early afterglow?
  - MXT: early X-ray afterglow – late prompt emission?
  - VT: early visible afterglow – late visible emission?
  - GWAC: prompt visible emission? – early visible afterglow?
  - GFTs: early visible/NIR afterglow

- **Possible complementary data:**
  - « standard » follow-up: afterglow (radio -> X-rays)
  - multi-satellite detection: prompt emission in other energy channels? e.g. with Einstein Probe (X-rays) or Fermi/LAT (HE gamma-rays)
  - Exceptional cases: e.g. VHE detection (prompt? afterglow?) or multi-messenger association (GW, neutrino)

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- Science Products generated by VHF/XBAND pipelines:
  mostly automatic analysis developed to generate near-real time/fast analysis of SVOM GRBs and communicate the results rapidly (notices, circulars).

  Goal: favor an efficient follow-up.

- Analysis/interpretation for publication is different:
  - New analysis, human-supervised, not necessarily with the same tools
  - Scientific interpretation

    = Today's discussion

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- **Test case: a bright GRB detected by all instruments of SVOM (space/ground)**

- **Data available from SVOM**
- **Possible complementary data**

- **Are we ready to analyse and physically interprete these data for publication?**

  - Which analyses? Which tools? Etc.
  - For each case: who are the experts within the « French » side of SVOM?
  - If we don't have the skills for certain analyses: which action to take?

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- Minutes of the meeting: Google Doc, see the link on indico
- Speakers: please upload your presentations on indico: useful archive
- Many of us are may lead a SVOM GRB paper in the future. One of the aims of this day is to start building a common understanding of the analyses that are needed, and to start listing the skills available among us.
- No tutorial today: we can envisage training sessions in the future.

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- **10h05 Prompt high-energy emission (and transition to the afterglow ? [ECLAIRs and GRM, with possibly other instruments]**

- *10h50 Coffee Break*

- **11h15 Late prompt/afterglow in X-rays [MXT with possibly other instruments]**
- **12h00 Prompt/Afterglow in the visible/near-infrared [VT, GWAC, GFTs, with possibly other instruments]**

- *12h45 Lunch*

- **14h00 Correcting for the absorption in the context of a multi-λ data set**
- **14h45 Taking into account data of external origin (follow-up partners, GCN): (1) the case of a "standard" follow-up (e.g. radio to X-rays)**

- *15h30 Coffee Break*

- **15h55 Taking into account data of external origin (follow-up partners, GCN): (2) exceptional cases (e.g. detection at HE/VHE, multi-messenger event, etc.)**
- **16h40 Interpretation/Modelling**
- **17h25 Final discussion**