### Meeting on the preparation of the SVOM Core Program Science (GRB Studies)

## Rapport sur les contributions

General introduction: objectives o  $\dots$ 

ID de Contribution: 10 Type: Non spécifié

#### General introduction: objectives of the meeting

lundi 6 mai 2024 09:30 (15 minutes)

Orateur: Prof. DAIGNE, Frédéric (Institut d'Astrophysique de Paris - Sorbonne Université)

#### Introduction: objectives of this session

lundi 6 mai 2024 09:55 (10 minutes)

Introduction: objectives of this ses...

- short summary of the data available in such a "bright GRB with a slew" scenario
- short summary of the science products generated in the context of the observation of a bright GRB with a slew
- short reminder about the products that were listed in the initial versions of the SR3 document (Scientific Requirements for the Core Program): some advanced products have to be discussed today.
- a clear objective is to identify the skills/tools/... necessary to perform relevant analyses of available data and their interpretation in the context of a scientific publication
- an important objectif is to start to build a list of "experts" within the "French" side of the collaboration, with their skills/tools. A similar work will be done on the Chinese side and this will help future discussion in coming weeks.

Orateur: Prof. DAIGNE, Frédéric (Institut d'Astrophysique de Paris - Sorbonne Université)

Classification de Session: From the production of the science products to the publication

ID de Contribution: 14 Type: Non spécifié

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

lundi 6 mai 2024 10:05 (45 minutes)

**Classification de Session:** From the production of the science products to the publication

ID de Contribution: 15 Type: Non spécifié

### Late prompt/afterglow in X-rays [MXT with possibly other instruments]

lundi 6 mai 2024 11:15 (45 minutes)

Classification de Session: From the production of the science products to the publication

ID de Contribution: 16 Type: Non spécifié

## Prompt/Afterglow in the visible/near-infrared [VT, GWAC, GFTs, with possibly other instruments]

lundi 6 mai 2024 12:00 (45 minutes)

**Classification de Session:** From the production of the science products to the publication

ID de Contribution: 17 Type: Non spécifié

### Correcting for the absorption in the context of a multi-wavelength data set

lundi 6 mai 2024 14:00 (45 minutes)

Classification de Session: From the production of the science products to the publication

ID de Contribution: 18 Type: Non spécifié

## 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)

lundi 6 mai 2024 14:45 (45 minutes)

Classification de Session: From the production of the science products to the publication

ID de Contribution: 19 Type: Non spécifié

## Taking into account data of external origin (follow-up partners, GCN): (2) exceptional cases (e.g. detection at HE/VHE, multi-messenger event, etc.)

lundi 6 mai 2024 15:55 (45 minutes)

**Classification de Session:** From the production of the science products to the publication

ID de Contribution: 20 Type: Non spécifié

#### Interpretation/Modelling

lundi 6 mai 2024 16:40 (45 minutes)

Classification de Session: From the production of the science products to the publication

ID de Contribution: 21 Type: Non spécifié

## Final discussion: review of the list of "experts" identified within the collaboration - Missing tools/skills/actions to take

lundi 6 mai 2024 17:25 (20 minutes)

**Orateur:** ALL PARTICIPANTS

Classification de Session: From the production of the science products to the publica-

tion

ID de Contribution: 22 Type: Non spécifié

#### End of Monday's discussion

mardi 7 mai 2024 09:30 (25 minutes)

# Introduction: (1) organisation of SVOM Science: SSMP, JWSG, Operational & Scientific Groups ("GRB (population) Studies") - (2) Objectives of the second day of the meeting

mardi 7 mai 2024 09:55 (10 minutes)

Introduction: (1) organisation of S...

- general organisation: (a) SVOM Science Management Plan; (b) SVOM Joint Science Working Group (JSWG); (c) Operational groups; (d) Scientific groups
- · a few words about the operational groups related to core program activities
- a focus on the scientific group "GRB (population) Studies" = the topic of this workshop
- all these groups include Chinese and French colleagues.
- a first goal of the workshop is to discuss the scientific projects that are our priorities in each lab, with the expected contributions we can provide, and with a focus on the projects for the early-career scientists in our groups (PhD students, postdocs) = morning sessions
- a second goal is to discuss a publication plan, at least for the first year(s) = afternoon session
- a last goal is to discuss how we would like to organise the "GRB (population) Studies" group and how we would like to work within it, before starting the discussion with our Chinese colleagues on this topic within the coming weeks (afternoon session).

Orateur: Prof. DAIGNE, Frédéric (Institut d'Astrophysique de Paris - Sorbonne Université)

ID de Contribution: 24 Type: Non spécifié

### Discussion: which scientific projects are our priorities (in each lab)?

mardi 7 mai 2024 10:05 (45 minutes)

Discussion: which scientific proje...

- it would be nice to prepare this session in each group before the workshop to be able to give a synthetic view
- the discussion is of course related to GRB studies, including the physics of the GRB phenomenon and the use of GRBs as a tool for other studies.
- it would be useful to indicate whether potential collaborators have already been identified for certain projects within the Chinese side of the collaboration, or outside.

Classification de Session: SVOM GRB Studies

Discussion: which scientific proje...

ID de Contribution: 25 Type: Non spécifié

## Discussion: which scientific projects are our priorities (in each lab)? (continued)

mardi 7 mai 2024 11:15 (45 minutes)

Classification de Session: SVOM GRB Studies

Lunch break

ID de Contribution: 26 Type: Non spécifié

#### **Lunch break**

mardi 7 mai 2024 12:00 (2 heures)

ID de Contribution: 27 Type: Non spécifié

#### **Publication plan**

mardi 7 mai 2024 14:00 (1h 30m)

- conditions to start a paper on a single SVOM GRB
- papers focussing on one topic with n>1 SVOM GRBs
- papers on SVOM instrument performances regarding GRB detection and characterization
- papers on detection/upper limits in association with an external observation
- · catalog papers
- etc.

Classification de Session: SVOM GRB Studies

ID de Contribution: 28 Type: Non spécifié

## Organisation of the Science Group "GRB (population) Studies"

mardi 7 mai 2024 15:55 (1h 30m)

- feedback from other collaborations: Swift? Fermi? other?
- organisation to follow papers in preparation, to suggest new projects to start, to keep track of the analyses done in the context of these various projects, etc.
- organisation for the internal refereeing process for SVOM papers on GRBs
- etc.

Classification de Session: SVOM GRB Studies