SVOM Scientific Workshop Conclusion

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SVOM Scientific Workshop Conclusion École des Houches

April 2016, in a Little Village Far, Far Away...



The site of the *École de Physique des Houches* at the entrance of the Chamonix Valley

Jacques PAUL

SVOM Scientific Workshop – Les Houches, 15 April 2016 – Conclusion

The SVOM Science Community Emerged



One of the main goal of our Workshop has been achieved: meet for the first time the core of the world wide SVOM Science Community...

Implementation of the SVOM White Paper

Bearing in mind that the SVOM White Paper should focus on what could be the contribution of SVOM to open scientific topics, it has been decided to split the drafting into five sections regulated by a Coordinator.

SVOM Instrumentation: Stéphane SCHANNE

GRB Phenomenon: Frédéric DAIGNE

GRBs and high redshift universe: Patrick PETITJEAN

ToOs: Cyril LACHAUD

Observatory Science: Jérôme RODRIGUEZ

Section Content #1

SVOM Instrumentation

SVOM mission profile

SVOM instrument characteristics

GRB Phenomenon

• The population of classical long GRBs: physical mechanisms

- The population of classical long GRBs: characterization of the population
- The population of short GRBs (includes the synergy with GWs)
- The diversity of stellar explosions (soft GRBs, ultra-soft GRBs, sub luminous GRBs, etc.)

 GRBs as particle accelerator (link with CR and neutrinos – to concentrate on the Physics)

Section Content #2

GRBs and high redshift universe

- GRBs at high redshift
- GRBs to study the evolution of star formation
- GRBs to study galaxies
- Absorption spectroscopy on the line of sight of GRBs (IGM reionization, etc.)
- GRB as standard rulers?

ToOs

Search for SVOM counterparts on multi-wavelength triggers
Search for SVOM counterparts on multi-messenger triggers

Section Content #3

Observatory science

- Active Galactic Nuclei
- Other extragalactic sources
- Galactic sources
- Miscellaneous topics (e.g. CXB)

What is Expected from Section Coordinators

Coordinators have been asked to:

- Harmonize the texts between the different chapters
- Define and write a header (if necessary)
- Respect the page allocation
- Choose figures
- Present one slide of the status of their section

Page & figure allocation

Topics	Number of pages	Number of figures
Introduction & Context	2.5	1
SVOM Instrumentation	5.5	3
GRB Phenomenon	11.0	5
GRBs and high redshift universe	11.0	5
ToOs	5.0	2
Observatory science	5.0	2
TOTAL	40.0	18

The page allocation does not include the references and the figures

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SVOM White Paper Schedule

First draft of each section END OF THE WORKSHOP (??)

- Final version of each section sent to the editors (Bertrand Cordier and Jacques Paul), to the following email address: svom2016@gmail.com
 END OF APRIL
- First version of the SVOM White Paper produced by the editors MID MAY
- Review of this version
 END OF MAY (during the SVOM Project Meeting in Toulouse)
- Approval of the final version MID JUNE (by e-mail exchange)