# CF03 Solicited White Paper FAQ

#### **General**

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<u>Q: How are the white papers different from a "cut and paste" collection of LOIs? What is the expected value added?</u>

Q: Is there a page limit for this white paper? (or a range of page numbers preferred)

<u>Q: The Snowmass process occurs in the context of the US funding structure. How much should we be trying to reach the non-US community for participation?</u>

Q: What are best practices for identifying people to write sections of solicited white papers?

#### **Facilities**

Q: Should all the facilities that have submitted LOIs be covered in our facilities white paper? Q: Should all the facilities that have submitted LOIs only be covered in our facilities white paper, and should we discourage separate individual facility white papers?

Q: What if a facility exists but not the operations? [e.g. DESI-II] Do we discuss this in our facilities white paper?

Q: What if a facility exists and operations are covered, but there may not be science money? [e.g. Rubin, Roman?] Or dark matter science is excluded from proposal calls? [e.g. Like exoplanet EPRV spectrographs] Do we discuss this in our facilities white paper? Q: Do we cover CMB-S4 in our facilities white paper? (It is technically already a DOE approved project.)

Q: Do we cover US ELT in our facilities white paper?

<u>Q:</u> Some facilities have a lot of technical/instrumental description in the public domain that can be referred to, however, some facilities do not. How much should we describe the technical/instrumental details of new facilities versus focusing on the science that it can do?

## General

# Q: Are there guidelines/rules/recommendations for how to assemble author lists in the individual Snowmass white papers?

A: There are no rules for constructing author lists for Snowmass white papers. We do have a few recommendations that may help make this process easier. (1) We suggest that listing authors alphabetically may help limit debates about author order. If it seems merited, facilitators can be indicated in the author list, or the list of facilitators can be provided after the author list. (2) When possible, we suggest listing the authors of each section at the beginning of the section. This will give more detailed information about an individual's contributions. (3) We

suggest separating the list of authors (people who have contributed text, figures, ideas) from the list of "endorsers" (people who are expressing their support for the subject matter).

# Q: How are the white papers different from a "cut and paste" collection of LOIs? What is the expected value added?

A: The primary purpose of the white papers is to identify "Critical Questions and Opportunities" and make the case for their importance. Sort, reorganize, LOIs along the lines of science enabled. Synthesize ideas into a coherent document. Identify any missing pieces that may not have been well expressed by LOIs. Review what was in the LOIs and make specific decisions about scientific highlights.

### Q: Is there a page limit for this white paper? (or a range of page numbers preferred)

A: There is no strict page limit for the white papers. In most cases, we expect the white papers to not exceed 30 pages. To get a sense of what was submitted in 2013, you can find Cosmic Frontier white papers on the SLAC Snowmass website and in the special issue of Astroparticle Physics:

https://www.slac.stanford.edu/econf/C1307292/docs/CosmicFrontier.html https://www.sciencedirect.com/journal/astroparticle-physics/vol/63/suppl/C

# Q: The Snowmass process occurs in the context of the US funding structure. How much should we be trying to reach the non-US community for participation?

A: The Snowmass webpage says: "Snowmass is a scientific study. It provides an opportunity for the entire particle physics community to come together to identify and document a scientific vision for the future of particle physics in the U.S. and its international partners." Snowmass does provide guidance that helps guide US funding agencies. However, the scale of many HEP projects is such that international contributions are often required. Thus, Snowmass is a fundamentally international process with international contributions at the advisory, convener, and contributor level. In fact, strong international support for specific scientific topics or projects can be seen as a benefit. That said, projects that do not have any US involvement are unlikely to see much direct benefit from the Snowmass process.

# **Q**: What are best practices for identifying people to write sections of solicited white papers?

A: We envision that the white paper facilitators will lead the development of the scope and skeleton of the solicited white papers. Once a paper skeleton is assembled, we expect that they will broadly advertise to the community for authors with expertise and interest in contributing to specific sections. We encourage facilitators to think broadly and inclusively when identifying authors. In particular, personal outreach and direct invitations can be very important for recruiting a diverse set of authors. We encourage facilitators to consult with each other and with the conveners to try to encourage participation from a large cross section of the community (i.e., spanning a range of identities, career stages, institutions, etc.). Look for patterns among existing author lists and think about possible gaps in representation. It is fine to use email, Slack, social

media, etc. to advertise paper participation (different demographics rely on different communication methods).

## Facilities

# Q: Should all the facilities that have submitted LOIs be covered in our facilities white paper?

A: Our goal is to represent the interests of the community. That being said, we leave it up to the facilitators/contributors to define the scope of each white paper. In this case, you should feel empowered to determine which facilities are best to include in your white paper and which would be better covered in other white papers (either submitted to CF03 as a non-solicited paper or submitted to another CF topical group). To some extent, it will depend on which facilities/authors are willing to contribute.

# Q: Should all the facilities that have submitted LOIs only be covered in our facilities white paper, and should we discourage separate individual facility white papers?

A: Since some facilities are proposing science that is spread across multiple CF topical groups, we do not think you should discourage separate papers from facilities if they choose to write them. The goal of the CF3 facilities paper is to specifically focus on the dark matter science that will be enabled by new facilities, so there is no need to duplicate more general facility information that is provided elsewhere. Feel free to redirect questions about non-solicited white papers to the CF3 conveners.

# Q: What if a facility exists but not the operations? [e.g. DESI-II] Do we discuss this in our facilities white paper?

A: Extensions of operations of current facilities could be included in this white paper if they are a substantial expense (to the extent that they will be competing with funding of new facilities)

## Q: What if a facility exists and operations are covered, but there may not be science money? [e.g. Rubin, Roman?] Or dark matter science is excluded from proposal calls? [e.g. Like exoplanet EPRV spectrographs] Do we discuss this in our facilities white paper?

A: These facilities could be mentioned briefly, but we see the goal of this white paper as focusing on new facilities (or new operation modes for existing facilities) rather than those that are already funded through construction and operations. We expect that the potential dark matter science opportunities for these facilities to be covered in other solicited white papers.

# Q: Do we cover CMB-S4 in our facilities white paper? (It is technically already a DOE approved project.)

A: CMB-S4 is in an interesting state. I believe it has CD-0 from the DOE, but is not formally "out of the woods" (though this may change in the next several months…). Since there is already a lot of information about CMB-S4 out there, I would group it into the same category as Rubin and Roman.

## Q: Do we cover US ELT in our facilities white paper?

A: To the extent that they are new facilities that can address dark matter science questions, yes.

# Q: Some facilities have a lot of technical/instrumental description in the public domain that can be referred to, however, some facilities do not. How much should we describe the technical/instrumental details of new facilities versus focusing on the science that it can do?

A: The focus should be dominantly on the science enabled by the new facilities. Technical details that are available in the public domain can certainly be referenced and do not need to be repeated. However, it may be useful to call out specific technical design details that are critical to enabling dark matter science, especially if those components are unique to that facility, novel, and/or are not assured of inclusion in the final design.