Documents to be prepared for



1. Letter of Intent (LoI)

2. Document for European Strategy

Physics Beyond Colliders mandate extended by 2 years, BUT

documents in preparation by the workshop are due end of 2018 as planned before

we can prepare and present the Letter of Intent as soon as we can, aiming at the end of 2019

N.B.: being submitted to the European Strategy for a general approval on the CERN research lines, probably the SPSC will suspend the recommandation until the completion of the ES period (2018-2020), i.e. sometimes after 2020

1. Remind that a **LOI** MUST contain:

- the optimized final detector we will propose to build (with the simulation plots and results which justify and support the choice)
- a strategy for the analysis
- for the MuonE project, a strategy how to achieve the systematics uncertainty planned must de described
- estimate of cost and financing coverage and sharing (even if tentative/preliminary)
- a detailed structure of a collaboration

Important:

In our case, we will also use this document to apply for the approval of some beam time to run in the final location (upstream COMPASS) in **2021**.

It will be crucial to explain exactly the goals of such a 'pilot run'.

Aiming to have a LoI at the end of 2019 is ambitious, considering the status of today w.r.t. the content:

- detector still not optimized, no simulation plots favouring or disfavouring different hardware solutions (but progressing...)
- sharing of activities among several groups not yet well defined
- collaboration still not consolidated
- no publication from testbeam 2017 submitted yet
- analysis of 2018 to be pursued
- strategy for systematics (ex.: how do we use the normalization region and the signal region?)
 explicitely described

We will go ahead to prepare a **Lol** in parallel with all the activities above, producing the necessary inputs. Proposal: Umberto and I will circulate a frame (and possibly more...) for the

beginning of January 2019. It will contain the assignment of the tasks to specific names and precise time profile will be defined for the different contributions

10/24/18

2. Document for European Strategy:

?? What about send to ES an independent (from the PBC ones) document about the mu-e project**??**

It must obey the rules described in the document shown in the next page

Deadline is the **18th december 2018** (Beginning of November the submission template will be available on the ES page).

February 2018



Contact: EPPSU-Strategy-Secretariat@cern.ch

Guidelines for submitting input for the 2020 update of the European Strategy for Particle Physics

Cover page (1 page)

Each document submitted should carry a single cover page containing no more than the title, the contact person(s) and an abstract.

Comprehensive overview (maximum 10 pages)

This core part of the document must be no more than 10 pages long (excluding the cover page) and must provide a comprehensive and self-contained overview of the proposed input. It should address:

- scientific context,
- objectives,
- methodology,
- readiness and expected challenges.

Addendum

A separate addendum is to be provided addressing the following topics (where relevant):

- interested community,
- timeline,
- construction and operational costs (if applicable),
- computing requirements.

Format and deadline for submission

The cover page and the comprehensive overview are to be submitted as a single file, the "main document", in portable document format (pdf) by 18 December 2018. The addendum is to be submitted as a separate file by the same deadline. A dedicated submission portal will be available on the EPPSU website as of October 2018, once the Strategy update has been formally launched by the Council at its September 2018 Session. The link to the EPPSU website will appear on the CERN Council's web pages - https://council.web.cern.ch/en - and be widely communicated through the appropriate channels.

Distribution

Both documents submitted (main and addendum) will be passed on to the Physics Preparatory Group (PPG) and the European Strategy Group (ESG). Unless explicitly requested otherwise, they will also be made public. The option not to make either document public will be available upon submission via the dedicated portal.