

PPTAP: Software and Computing Roadmap Workshop

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Rationale

- ❖ International community is currently putting together R&D roadmaps in the **detector and accelerator areas**
 - **Software and computing (S&C)** is not directly included
 - UK is providing significant input into that process
- ❖ STFC launched the PPTAP process to create a UK R&D roadmap and to feed into the above process
 - Previously no 'PP R&D strategy' in STFC and no way of developing one
 - **S&C is included as one of the three key pillars in the STFC roadmap**
- ❖ This workshop aims to gather community input for the S&C part of the UK R&D roadmap
- ❖ This is a big opportunity to make the case for new funding to UKRI
 - Decisions could have long-lasting consequences
 - If we fail to make our strongest possible case we are missing a huge scientific, funding and impact opportunity
 - **We are here today to ensure we make the most of this opportunity!**

Roadmap

- ❖ S&C roadmap will broadly focus on the following sections:
 - **What's been done before and other roadmaps (Mon)**
 - **Short/medium/long-term challenges, requirements and priorities (Mon)**
 - **UK's strengths and how these relate to priorities (Mon)**
 - **Synergies with other areas (Mon)**
 - **Rationale: benefits to physics and benefits to UK (Mon)**
 - **Framework of funding (Tue)**
 - **Skills, training and career development needs (Tue)**

- ❖ **Content of roadmap**
 - **Will not** be a detailed list of the R&D needs of the various experiments
 - Although this will be referenced/detailed in background document
 - **Will** aim to pull out cross-cutting R&D needs into more general points
 - Important list is inclusive and points aren't missed
 - Important to note that we are not ranking the various R&D needs

Process

❖ As there is no European roadmap, following a slightly different process to the detector and accelerator parts of the PPTAP roadmap

❖ Process

- Review/collect **pre-existing literature**
 - Extensive amount of roadmaps/projects already (see next talk)
- **Discussions** with a range of S&C experts
 - Understand present/future landscape
- **Survey** to gather information from wider community
 - Collect individual input
 - Probe areas where a range of views exist
- **PPTAP S&C Workshop**
 - Collect project/experimental input
 - Forum to discuss key areas where a range of views may exist
- **Final roadmap**
 - Software & Computing R&D Roadmap Report
 - Input into main PPTAP document

Document Compilation

❖ Following the workshop:

- Will review all the information and feedback we've collected
 - Use it to produce first draft of S&C R&D roadmap
- The first draft of the document will be circulated to all workshop participants
 - Document will be open for people to post comments
 - Identify any key missing points
 - Iterate on the exact wording
- Feedback will be incorporated in 2nd version
 - Will also be circulated to all participants for comment
- Used to produce final version to be integrated into the overall PPTAP report
 - People will also be invited to comment on the final PPTAP report

Structure of Workshop

- ❖ The workshop broadly has the following structure:
 - **Day 1:** Experiments, infrastructure and external experts provide a overview of the S&C R&D requirements, challenges and synergies.
 - Focussed on collecting input and establishing overview
 - Any general points that require more detailed discussion will be identified and discussed in Tuesday afternoon session
 - **Day 2:** More detailed discussion of **a selection of cross-cutting points**
 - Key areas like training, career prospects and research technical professionals
 - Discussion will be on points raised/noted today and some identified from survey/previous discussions
- ❖ Using live Google document to collect additional feedback
 - Please leave thoughts/suggestions/feedback in document
 - Especially if can not attend a session or if discussion time runs out
 - Neil and I will be taking notes in this document throughout
 - Day 1: <https://bit.ly/PPTAPSoftwareComputingNotes>
- ❖ Please raise a hand if you want to ask a question

Backup