

PPTAP: Synergies within HEP

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Synergies with HEP

❖ Statement:

- The success of particle physics experiments relies on innovative S&C and state-of-the-art e/s-infrastructure. To prepare and realise future research programmes, the community must maintain a strong focus on S&C.
- S&C R&D programmes and associated infrastructures should be supported at CERN, national institutes, laboratories and universities.
- Collaborative platforms and consortia must be adequately supported to provide coherence in these R&D activities. Significant synergies can be realised across the programme from common code (e.g. [DIRAC](#)), algorithm (e.g. [acts](#)) and hardware (e.g. FPGAs) development.
- The community should strengthen global defined S&C R&D roadmaps produced by various bodies (HSF, WLCG, DOMA, experiments/projects) and they should be invited to officially feed into European wide R&D roadmaps, which should be used to support proposals at the international, European and national levels.

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❖ Discussion points:

- Is there a need for an 'official' European Roadmap in this area, similar to the detector and accelerator R&D roadmaps?
 - Should the various S&C bodies producing roadmaps officially feed into that process or have a parallel process to produce a R&D roadmap?
- Along this line:
 - How should the UK focus its priorities for investing in S&C R&D based on what other countries are excelling / investing lots of effort in?
 - Should the UK remain focussed on its strengths regardless of what others are working on and cooperate via common forums?
 - How should the UK interact with other international initiatives?
- Swift-HEP, IRIS-UK and GridPP/WLCG already coordinate cross-experiment S&C R&D in the UK, are these sufficient or is anything more needed?
 - Should there be a body to coordination across all the S&C areas?
- Are there areas where we are not exploiting potential cross-experiment or international synergies?