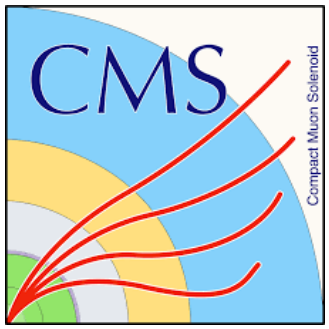

Efficient Computing for High Energy Physics

Sinéad Farrington, Conor Fitzpatrick, Dave Newbold

ECHEP Progress

- Area meetings have all happened since our last monthly ECHEP meeting
  - Area leaders have gathered a lot of useful information and inputs from across the community – good attendance
  - They were tasked with preparing interim summaries of the information and preparing proposals for
    - Deliverables over the next months
    - Best uses of new FTE in their areas in the next years
    - Good summaries – some concrete deliverables already defined but need concrete deliverables/FTE plans fleshing out further, UK expertise summaries strengthening
  - Inputs have been used to help writing the draft proposal for PPRP (PI Davide Costanzo) that will be summarised today
    - Invited to come forward quickly if you want to be involved in hosting some of the projects, if you haven't already expressed a wish to do so

Link to other projects + overall plan

- ECHEP aims to provide substantial content to the PPRP
- Part of ECHEP's proposal to the opportunity call, was that it will provide a detailed plan of work for a 3 year R&D project to follow it, together with impact plans
  - This needs to be realistic, in the international context and not solve problems in a silo or ignore already-existing solutions
  - Cannot be an open-ended wish list, it should be needs-based
    - This is the point we are at – we have a needs-based list
- ECHEP extended a further six months in order to keep the momentum of this community we've built

PPRP Bid

- Statement of Intent for two year project went to Science Board since our last monthly meeting
  - Successful approval to submission in July, details from Davide on the preparation process
  - Feedback
  - "The goals toward efficiency were broadly understood but, there was a suggestion that the case to PPRP would need to evidence more clearly the cost reductions and gains of this software approach compared to, for instance, what you might call the `baseline' of the current approach."
  - In ECHEP we should help formulate this given the expertise here.

Goals of the ECHEP Project (6 months)

- Discuss the challenges of the HEP software stack (focused on HL-LHC but others welcome) (✓w.s.)
- Inform ourselves on alternative architectures
  - Reach out to industry (✓w.s.)
- Discuss work already done/ongoing to address this, within the UK and internationally
  - Engage with existing organisations e.g. HSF, IRIS-HEP(✓w.s.)
- Identify proof-of-principle demonstrations of new platforms (some defined, more needed)
- Form a new community of experts in the UK with international engagement (✓)
  - Requires engaging with, and providing, training opportunities (some)
- Establish working parties, define deliverables (✓)
- Detailed plan and impact strategy for subsequent, ~three year R&D project will be written(begun)

Workshop

- 6/7 July https://indico.cern.ch/event/928965/
- Registration encouraged! (virtual of course)
- Get in touch with Area Leaders or Conor/Dave/Sinead if you want to show work there