HSF Feedback for IRIS-HEP

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IRIS-HEP Steering Board, 2020-02-18
Thank you!

• The engagement of US colleagues in the HSF was absolutely crucial in getting the HSF Community White Paper written
  • US colleagues contributed hugely to all of the white papers
  • Practical help from DIANA-HEP and S2I2-HEP helped make all of the preparatory workshops a success
  • Convergence on the final CWP Roadmap was reliant on US colleagues
  • Strong support of the US community was critical to our successful presentation of the roadmap as a global community view

• We think, from the HSF side, that this was a virtuous circle
  • And that the work we did on the CWP was a contributing factor to the successful IRIS-HEP bid
IRIS-HEP and the HSF

- I will comment mostly on the following areas, which are closest to where the HSF is active:
  - Training
  - Innovative Algorithms
  - Analysis Systems
Training

• Training is one of the great challenges for the HEP community
  • New skills are needed
  • Experts are both busy and in short supply

• IRIS-HEP and FIRST-HEP are having a positive impact here
  • Paying for membership of The Carpentries has provided concrete benefits, reducing the load on our experts for basic level training
  • Joint organisation, with the HSF, of the Software Carpentry event at CERN was a big benefit
    • Proved that this level of training is very much in demand...
      • probably still exceeding our capacity to organise it
  • Transition to sustainable training still not clear
    • How many trainees will become the trainers in future events
    • Carpentry certification for HEP experts?

• For further work at the top of the training pyramid we need to work even more in cooperation (openlab, SIDIS, HSF)
Innovative Algorithms and Reconstruction

- Focus on the algorithmic level is much appreciated
- As is the attempt to be experiment neutral
  - Nothing much is trivial these days
  - Need to challenge legacy approaches is clear
- Joint meeting last week between IA Group and HSF Reconstruction group was very positive
  - High attendance probably helped by co-organisation and advertising
  - Reduce repetitive presentations
  - Encourage people to have community viewpoint
- A lot of care must be taken when applying new techniques at different working points from different experiments
  - Please take feedback on board about properly defining the baseline
    - Specifically this was a comment about LHCb PV finding
  - More outreach to experiments would help
    - This can be an area where the HSF can help
Analysis Systems

- Approaches taken by IRIS-HEP here are innovative
  - There is a very positive view of this within the HSF
  - Definite encouragement to continue with this work

- Engagement with the HSF Analysis Group has been good
  - Coffea presentations, in particular, much appreciated
  - Strong desire to continue that interaction towards full-scale systems
  - **There is some concern that the problem is also not yet really properly defined**
  - Feedback from the Analysis WG can be incorporated into the R&D, making sure that feedback loops close properly
    - E.g. from pre-CHEP analysis meeting

- Scikit-HEP project: commitment, contributions and collaboration are really important
  - **But that collaboration is a bit hard to see on the IRIS-HEP website**
  - Diminishes the impact and the possibility to attract more collaboration
General Comments and Thoughts... 1

• IRIS-HEP is having a very positive impact in the field that we can see
  • Training, Innovative Algorithms, Analysis Systems, ... but also in other areas

• Good sense of a snowball effect with other funding opportunities
  • “If they can do it, so can we...”
  • This is another very positive outcome
  • Particularly in Europe this will balance the HSF’s role if more Old World funding comes

• Meeting overload is a general problem in our field
  • It is hard to keep track of everything which is going on
  • Joint meetings can be encouraged with the HSF
    • It can be helpful when topics align
    • Helps with cross-community and cross-project cooperation and visibility
General Comments and Thoughts... 2

• IRIS-HEP outreach to more experiments should be encouraged
  • LHCb, DUNE, Belle II are different working points, but still fall within the general scope of the project
    • Could the SSL also help these experiments?
  • “How can IRIS-HEP help me?” section on the website was suggested... or “How can I work with IRIS-HEP”?
• Current collaborations with others could be more visible as well
  • Could we envisage some joint student projects between IRIS-HEP and other HSF protagonists?

• HSF and IRIS-HEP have distinct roles in the community
  • Generally our feeling is that this is playing out well, but could be an issue if the HSF was asked to give an endorsement to IRIS-HEP (or any other funded project)
    • N.B. As we already discussed, letters of collaboration are not contentious