IA Session

David Lange

Princeton University

Currently 5 IA projects – we'll hear about 4 of them today

- Tracking oriented
  - MkFit / LST targeting CMS
  - ACTS
  - GNN tracking
- ML oriented
  - PVFinder
- LHCb Allen monitoring (we won't hear from this one, my fault)

- We asked each to talk about their results and year 5 plans and ideas for a beyond-year 5 IRIS-HEP successor

Sustainability

- IA projects are typically quite collaborative with significant funding from beyond IRIS-HEP (including international partners in some cases)

- Once IA projects get embedded into an experiment's reconstruction application, the sustainability burden also shifts towards the corresponding working groups within the experiment itself (possibly together with operations program funding)

- Projects that do not reach the point of being part of a reconstruction/simulation/etc application (or showing that they should be) likely do not get carried forward when the R&D stops

- We can discuss the specifics for each project as we hear from each one.

Evolution towards IRIS-HEP 2.0

- More on innovative ML
  - R&D on Differential programming / probabilistic simulation etc
- More on using accelerators
  - Not an excessive amount of expertise in IRIS-HEP today.
  - Should IRIS-HEP complement HEP-CCE in this area?
- Consider synergistic topicswith AGC – data formats issues such as readability and compression