

AS Fortnightly Team Meeting

[February 13th, 2024](#)

Attendees

Present: Jim,

Apologies:

Designated Note Taker:

Convener:

Group Agenda

1. Agenda for this meeting
 - a. IRIS-HEP Fellow Projects mentoring plan
 - i. <https://research-software-collaborations.org/projects>
 - ii. Coffea development (Matthew, Nick Smith, Lindsey) (to submit for the summer)
 - iii. Packaging for simulation (Matthew)
 - iv. Packaging for jet theory ML tools (Matthew, Henry)
 - v. Refactoring fastjet with Awkward LayoutBuilder (Javier, Jim)
 - vi. Dask in a HEP Analysis Facility at Scale (Alex, Oksana, Nick Smith, Jim)
 - vii. cppy-Numba integration (Vassil, Jim) (to submit for the summer)
 - viii. AGC re-visiting ML (might be more on the facility side with Kubeflow)
 - b. Deliverables and milestones
 - i. Adopt new ServiceX frontend version 3.0
 1. Ben and Gordon give a talk in 2 weeks at next meeting (February 27th)
 2. Distributed SQL joins as well that can be consumed by Dask
 - ii. All core components of the Analysis Systems pipeline fully support distributed analysis
 1. Matthew will give update on February 27th
 - c. IRIS-HEP Data Analysis Pipeline (IDAP)
 - i. First meeting: <https://indico.cern.ch/event/1367879/>
 - ii. AGC will be viewed as outside of IRIS-HEP community efforts
 - iii. Tools and pipelining will be IDAP
 1. Tools can be used everywhere
 2. Tools can be used to do an AGC-like analysis
 - iv. Distinct names give more distinction between the

- v. Need to be able to tie together the focus areas again, and the IDAP meeting of having a common pipeline gives a strong area of overlap and so is a good forum for this.
 - vi. Next meeting is March 15th
 - d. [AGC Demo Day March 2024](#)
 - i. 1st March at CERN (coffea heavy meeting)
 - ii. Ben giving demo
 - e. Nightly wheels for scikit-hep projects and IRIS-HEP projects
 - i. Awkward-cpp (active development)
 - ii. fastjet (Jim suggests as such a brittle build procedure, so having wheel building tests would be useful)
 - 1. Problems: autoconf, bash scripts
 - f. [PyHEP.dev 2024 announced](#)
 - i. in-person workshop in Aachen, Germany, to be held on August 26–30, 2024 (5 days)
 - ii. <https://indico.cern.ch/e/PyHEP2024.dev> == <https://pyhep.dev>
 - iii. More formal focus on having a document as an outcome from the workshop
 - g. SciPy 2024 conference involvement
 - i. Proposals due on February 27th
 - ii. Jim is Teen Track chair for 2024 (thanks Jim!)
 - 1. Would like to find someone to co-apply for Thinking in Arrays tutorial (looking towards Martin Durant for cosubmission)
 - iii. Sign up for reviewing proposals and papers
 - h. ACAT Talks?
 - i. Posters: Jim, Yana, Manasvi, Zoë
 - ii. Posters: KyongEon/Ben ServiceX
 - iii. Posters: Gordon/Ben LLMs reading Snowmass papers
 - iv. Poster: [check title] Gordon, Matthew, Vangelsi (ATLAS columnar AMG)
 - v. Talks: Jim has no idea if his invited talk is happening or not
 - vi. Talk: Lindsey Gray ([What will it take to do a HL-LHC analysis in 15'?](#))
2. Round table discussion
 3. Software Releases
 4. Topical meetings <https://indico.cern.ch/category/10570/>
 5. [Milestones and Deliverables](#) (folder)
 6. IRIS-HEP [Overview Monday board](#)
 7. IRIS-HEP [Metrics Monday board](#)

Topical Meeting Suggestions

Proposed highlights to copy/paste into reporting

Please add narrative sentences or bullet points to highlight in reporting.

Project Updates (narrative for reporting and details)

Ordered roughly from DOMA event processing > statistics tools > high level analysis tools

AS Grand Challenge

[Narrative Summary to copy/paste into reporting](#)

[More Detailed comments:](#)

Awkward Array

[Narrative Summary to copy/paste into reporting](#)

[More Detailed comments:](#)

uproot

[Narrative Summary to copy/paste into reporting](#)

[More Detailed comments:](#)

Histogram Projects

[Narrative Summary to copy/paste into reporting](#)

[More Detailed comments:](#)

Functional ADL

[Narrative Summary to copy/paste into reporting](#)

More Detailed comments:

- Adding enums to the translated xAOD features - these are necessary to extract detailed information (like calorimeter sampling fractions)
- Goal is to generate all the training data for the CalRatio analysis RNN using SX queries.

MadMiner

Narrative Summary to copy/paste into reporting

More Detailed comments:

Ppx

Narrative Summary to copy/paste into reporting

More Detailed comments:

pyhf

Narrative Summary to copy/paste into reporting

More Detailed comments:

GooFit and AmpGen

Narrative Summary to copy/paste into reporting

More Detailed comments:

Particle and DecayLanguage (Also AmpGen?)

Narrative Summary to copy/paste into reporting

More Detailed comments:

cabinetry

Narrative Summary to copy/paste into reporting

More Detailed comments:

Vector

[Narrative Summary to copy/paste into reporting](#)

[More Detailed comments:](#)

Docker images for experiments

[Narrative Summary to copy/paste into reporting](#)

[More Detailed comments:](#)

ROOT on Conda Forge

[Narrative Summary to copy/paste into reporting](#)

[More Detailed comments:](#)

Other Integration Efforts / Needs Across Projects

[Narrative Summary to copy/paste into reporting](#)

[More Detailed comments:](#)

Milestone Updates

From [GitHub Board](#)

Meeting Notes

New Action Items

- (Date) - (Assignee) - (Description)

Old Action Items