Institute for Research and Innovation in Software for High Energy Physics (IRIS-HEP)

Computational and data science research to enable discoveries in fundamental physics

IRIS-HEP is a software institute funded by the National Science Foundation. It aims to develop the state-of-the-art software cyberinfrastructure required for the challenges of data intensive scientific research at the High Luminosity Large Hadron Collider (HL-LHC) at CERN, and other planned HEP experiments of the 2020's. These facilities are discovery machines which aim to understand the fundamental building blocks of nature and their interactions. Full Overview

IRIS-HEP Steering Board Meeting #23

G. Watts

For the IRIS-HEP Executive Board

2025-01-14

Happy New Year!

"The IRIS-HEP Steering Board represents the Institute's stakeholders to provide, to the Executive Board, the stakeholder's input on the priorities, execution, and strategy of the Institute."

Thank You

Liz Sexton-Kennedy (FNAL)
CMS

Paolo Calafiura (LBL)
US ATLAS Ops Program

Simone Campana (CERN)
WLCG

David South (DESY)
ATLAS

Tulika Bose (U Wisconsin)
US CMS Ops Program

Patrick Koppenburg (NIKHEF)
LHCb

Graeme Stewart (CERN)
HSF

Ken Herner (FNAL)
The OSG Council

Welcome

steering-board@iris-hep.org

(you)

exec-board@iris-hep.org

(us)

Next Meeting Dates

Proposed Meeting Dates

May 20, 2025
July 15, 2025
October 7, 2025
January 13, 2026

We will send around an email shortly so everyone can check!

18-Month IRIS-HEP v2 Review

This is one of the major reviews for IRIS-HEP by the National Science Foundation.

- April 24-25, Madison Wisconsin
- Full scope of the IRIS-HEP program is covered
- Besides "us" managers giving talks, we will have presentations by post-docs, and posters by students.
- We will use some of the comments from the ATLAS/CMS talks today and LHCb and HSF talks next time in this review
  - Helps tune up are strategic vision for the next several years.
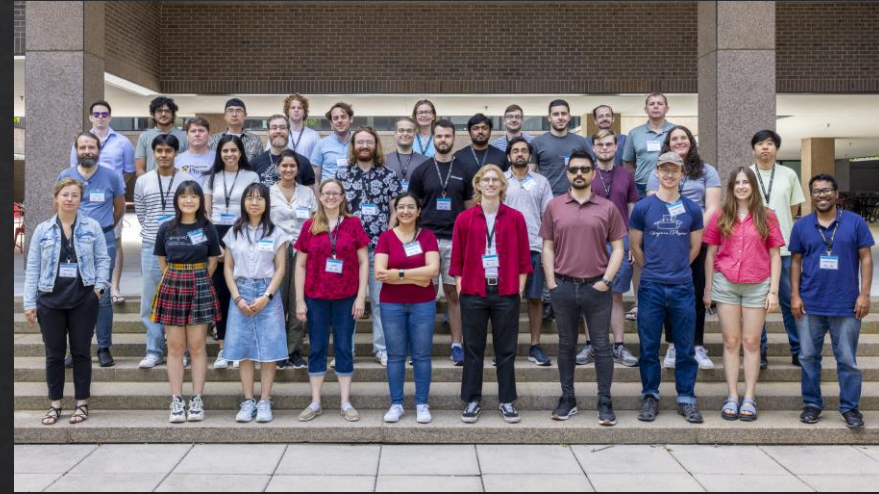 - Thank you very much for taking the time.

US OPS Training

US-ATLAS (Seattle)

US-CMS (Princeton)

- 2 Days of training post-summer meeting agenda.
- 30 at US ATLAS, 37 at US CMS
- Topics included Columnar analysis, Distributed analysis, Data Visualization, Coffea, Analysis Facilities, and Statistical Tools.

- Students did not have to pay for the flight for the summer meetings on their grant's dime.
- IRIS-HEP paid for graduate students (and some undergrads) attending: $750 for flights, lodging for the training, meals.

US OPS Training

Both OPS programs would like us to repeat this year.

	Dates	Training Dates
US ATLAS, UMichigan	July 21-23	July 24-25
US CMS, Rice University	May 21-23	May 19-20

- Working with local organizers to finalize training events organization
  - Rooms for students, room for training, catering, dinner, etc.
- We will do the same travel deal as we did previously
  - Up to $750 for flights to attend from the USA
  - Accommodation for the training days
- Will give graduate students training on tools and analysis and reduce per-grant costs for summer meeting attendance.

IRIS-HEP Sponsorship

- Software/Computing: "LHC to Future Colliders" Ecosystem workshop
  - spring 2025 TBD, probably at Princeton
- USCMS/IRIS-HEP 2025
  - 19-20 May 2025 (at RiceU, USCMS itself is 21-23 May 2025)
- MODE Workshop (differentiable programming)
  - 9-13 June 2025 (Crete)
- HSF-India Bangalore (16-22 Jun 2025)
- USATLAS/IRIS-HEP 2025
  - 24-25 July 2025 (at U.Michigan)
- CoDaS-HEP 2025
  - 21-25 July 2025, at Princeton
- JuliaHEP 2025
  - 28-31 July, 2025, at Princeton
- IRIS-HEP Retreat Sep or Oct 2025 TBD, at or near CERN likely
- Connecting the Dots 2025
  - will be in Fall 2025, at UTokyo (dates still TBD, soon)

We are quite active in both running and sponsoring various workshops
- "Intellectual Hub" effort
- Some of these we organize
- Some of them we provide significant help
- Some we sponsor directly
- Some we organize to send non-IRIS-HEP US participants to

HL-LHC analysis blueprint

Benchmark analyses to demonstrate our workflows
- Benefits both facilities and tool developers in the community (and IRIS-HEP)
- Get away from "simplified" demos into something that is truly relevant to analyzers
  - We already are a long way down this road – but – we'd like to do better!

February Software & Computing Week(s)
- ALICE, ATLAS, CMS, LHCb are all meeting the first week of February at CERN.
- Joint meetings between ATLAS and CMS already planned
  - e.g. One session motivated by the LHCC Analysis Facilities questions (3c/3a).

Can we carry this conversation further?
- Input from the LHCC drafts
- Survey circulated inside the experiments
- Meeting/2-day workshop in early March (Hybrid Zoom/CERN room)
  - Artifact: Report with Run 4+ Analysis assumptions, and some benchmark analyses, and some idea of future collaboration possibilities.
  - Discussion guided by survey responses ("lightning talks") and more regular experiment contributors

Questions & Comments?