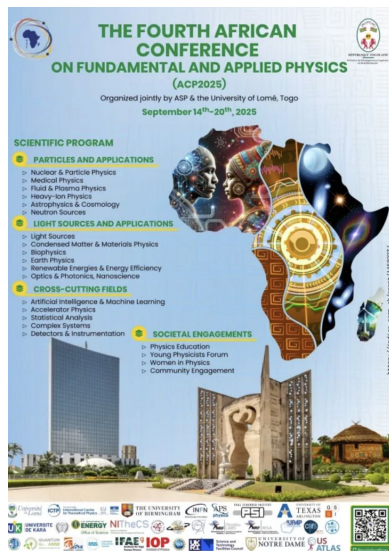


LHC Open Data Workshop:

Further information



20 Sep 2025
University of Lome, Togo

<https://indico.cern.ch/event/1458227/session/616093/#20250920>

<https://indico.ictp.it/event/11099/other-view?view=ictp timetable>



Further information

Thanks you for your participation.

We've covered a lot today! There are plenty of links to materials and resources already included in what we've shown today. If you want to learn more and then apply what you've learned to use make use of the resources, we provide links here to some other online resources.

Enjoy!

We are setting up a online forum so that you can keep in touch with the facilitators and other participants and to look for answers to any questions or issues that you may have. We will email you with more information.

- Tom, Farid, and Kate

What would be useful to know / study?

The Basics

- Unix shell (terminal and commands)
- Software installation (e.g. pip, conda, ...)
- Python programming
- Version control
- Useful python packages: numpy, matplotlib, pandas, uproot, awkward,

Once you know the basics, the rest is yours to learn and discover!

Software carpentry

SWCarpentry provides many nice online lessons on the following topics

- The Unix shell: <https://swcarpentry.github.io/shell-novice/>
- Version control with Git: <https://swcarpentry.github.io/git-novice/>
- Programming with Python:
<https://swcarpentry.github.io/python-novice-inflammation/>
- Plotting and programming with Python:
<https://github.com/swcarpentry/python-novice-gapminder>

HEP Software Foundation and IRIS-HEP

HSF provides online training resources from basic tools, software development and deployment, python, C++, HEP-specific tools, data analysis, analysis preservation, machine learning, and other courses

<https://hsf-training.org/training-center/>

Complete courses

These modules cover a variety of topics



Software Engineering for Scientific Computing

This course covers various best practices like testing, pytest, object oriented programming, packing, CI, and more.

 GitHub



Level up your python

Advanced bits of python (testing, debugging, logging, and more)

 GitHub



Particle physics methods

Learn about ROOT, RooFit, machine learning with TMVA, and physics simulations.

 GitHub