

Becoming "mainstream"

Or how to further engage with the open-source community

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Questions for reflection / discussion – Q1

What are the open-source conferences / workshops we should try to have a more “active” presence in?

❑ Next 2 slides give a (partial) overview of HEP and non-HEP conferences around Software & Computing, Statistics, Data Science, Machine Learning ...

- Not at all a comprehensive list! Focused largely towards data analysis

- There's also IEEE Real Time, LISA, etc., see <http://iee-npss.org/conferences>, <https://www.usenix.org/conferences>, ...

❑ Immediate conclusion:

many open-source events where HEP community presence is not overwhelming ... to say the least !

❑ It's not that we are doing anything wrong

We do have our own dedicated conferences/workshops, which work very well

❑ It's rather that we are not doing as much as we could !

❑ Is there a culture issue?

Most likely

❑ How to improve?

Just do it! = attend a broader range of events, further invite non-HEP speakers to our events

Event	Site	Topics
ACAT	Advanced Computing and Analysis Techniques	Confront the boundaries of computing, automated data analysis, and theoretical calculation technologies, in particle and nuclear physics, astronomy and astrophysics, cosmology, accelerator science and beyond.
CHEP	International Conference on Computing in High Energy and Nuclear Physics	Discussion forum for challenges in networking, computing and software for data-intensive science experiments.
DS@HEP	Data Science in High Energy Physics	Brings together computer scientists, data scientists, and physicists to explore cutting edge solutions to large-scale computational problems across HEP. We will look further into machine learning and big data solutions to problems in data analysis, pattern recognition, and model inference.
CTD	Connecting The Dots	Track reconstruction and other problems in pattern recognition in sparsely sampled data.

Non-HEP open-source SW&C / Statistics / Data Science / ML Events

(Non comprehensive!)

Event	Site	Scope
AnacondaCON	https://anacondacon.io/	Real World Data Science, Anaconda Enterprise Open Source Technology
JupyterCon	https://conferences.oreilly.com/jupyter/jup-ny	Bring together data scientists, business analysts, researchers, educators, developers, and core Project contributors and tool creators.
IEEE BigData	https://bigdata.ieee.org/conferences	Around Big Data – analysis, computing, cloud, ...
PyData	https://pydata.org/	International community of users and developers of data analysis tools to share ideas and learn from each other.
NIPS	https://nips.cc/	Multi-track ML and computational neuroscience. Invited talks, oral/poster presentations, demos.
GTC	https://www.nvidia.com/en-us/gtc/	GPU Technology Conference From DL to Gaming, via AI, VR and DevTools
EuroSciPy	https://www.euroscipy.org/	Cross-disciplinary. Focused on use and development of the Python language in scientific research.
SciPy	https://conference.scipy.org/	Participants from academic, commercial, and governmental organizations to (1) showcase their latest Scientific Python projects, (2) learn from skilled users and developers, and (3) collaborate on code development.
Strange Loop	https://www.thestrangeloop.com/	Multi-disciplinary conference bringing together developers and thinkers building tomorrow's technology in fields such as emerging languages, alternative databases, concurrency, distributed systems, security, and the web.

Strata Data Conference
and other O'Reilly conferences such as AI Conf.

<https://www.oreilly.com/conferences/>

Questions for reflection / discussion – Q2

How can we get support from experiments, projects, home institutions to have people attend open-source events and be part of the open-source community?

- As usual, a real challenge since country-dependent, funding sources vary, may require culture phase-shift, etc.
- First, raise community awareness on relevant & interesting non-HEP events
- And build relations & contacts ! Just as the CERN openlab
- See something where the HSF, not an experiment, could help
- Can the HSF compile and broadcast such a list of relevant events ? Seems reasonable. In a calendar ... ?
- Next is to broadcast to the various experiments
- As far as software is concerned:
contribute to open-source projects instead of creating your own little package with a bit of functionality added (when possible/suitable)

Initiatives can be made to bridge HEP and non-HEP ...

(Apologies for the advert
but important message is initiatives)

- ❑ We need stronger bridges with the Data Science and Machine Learning, SW&C communities:
- ❑ Invite speakers from interesting projects, tools, etc.
- ❑ Hopefully that may result in more of those projects, companies becoming aware and interested in our use cases ...
... they may then invite us too!
- ❑ Create new events where relevant, e.g. “Python in HEP” workshop
- ❑ All open now for discussion ...

PyHEP 2018 Workshop

7-8 July 2018
Sofia, Bulgaria
Europe/Zurich timezone

- Overview
- Timetable
- Contribution List
- Participant List
- Registration
- Travel Info
- Accommodation
- Proceedings
- Code of conduct

Contact us

✉ pyhep2018-organisation...

The **PyHEP workshops** are a new series of workshops initiated and supported by the [HEP Software Foundation](#) (HSF) with the aim to provide an environment to discuss and promote the usage of Python in the HEP community at large. Further information is given [here](#).

This first workshop, held just before the start of the CHEP 2018 conference, will focus on a review of where and how Python is used in our community, and what the future will hold. The workshop will be a forum for the participants, representatives of the community, to discuss topics around the areas of work identified in the HSF Community White Paper. There will be ample time for discussion.

Organising Committee

Eduardo Rodrigues - University of Cincinnati (Chair)
Graeme Stewart - CERN-HSF
Jeff Templon - Nikhef (Co-chair)

Sponsors

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