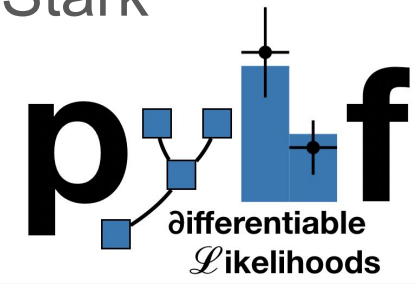
pyhf Users and Developers Workshop

Introduction and Logistics

Matthew Feickert, Lukas Heinrich, Giordon Stark

December 4th, 2023



Welcome!

The pyhf developer team is happy to have you all participating in this workshop!

If you have any questions throughout the week please ask one of us and/or email **pyhf-workshop-organisers@cern.ch**

Matthew Feickert

Giordon Stark

Lukas Heinrich

Workshop Goals: Users Section (Monday - Wednesday)

- Bring the **user community together** to discuss use and find potential overlaps (kernels for common use/new features) and collaborations
- Learn what tooling is being built **on top of** pyhf to meet analysis needs
  - Can this be put into common libraries (e.g. cabinetry, spey)?
  - Projects to extend for analysis (e.g. abcd_pyhf, neos, bayesian_pyhf)
- Study **user experience**: identify common pain points, areas for improvements
- Start writing these down **collectively** in the **workshop Google Doc**

Workshop Goals: Developers Section (Thursday - Friday)

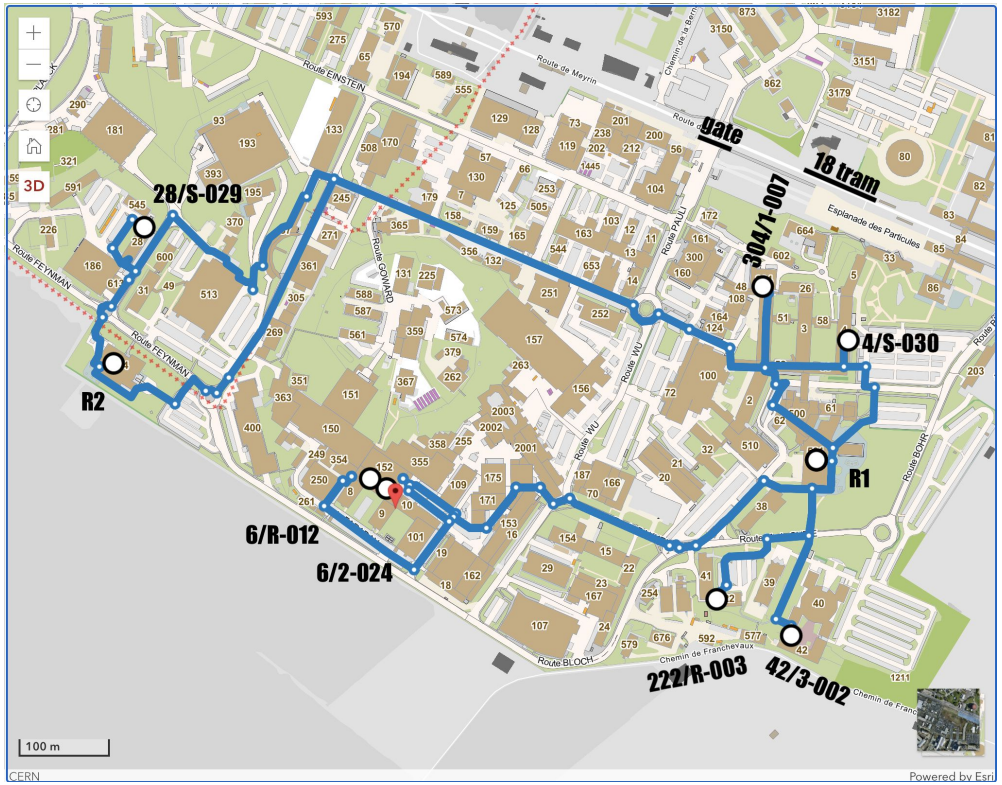
- Make everyone who wants to contribute to pyhf feel ***empowered*** to do so and equipped with knowledge of how
  - pyhf is an open source project for the whole community. It can be ***your*** project too.
- On-boarding session to induct new (and old) developers
- **Birds of a Feather** sessions: optimization, models, docs, etc.
- **Developer sprints**: got a task/feature/bug you wanna work on or fix? Documentation to improve?
- Sign up new volunteers to the developer team!
- Start writing these down **collectively** in the **workshop Google Doc**

Meeting Rooms

M:	222/R-003	304/1-007
T:	6/R-012	6/R-012
W:	4/S-030	28/S-029
R:	42/3-002	6/2-024
F:	6/2-004	6/2-004

Resources:

- CERN Map
- CERN Campus mobile app (Google, iOS)



Safety and Evacuation

Follow these signs:

1. If alarm sounds, leave the building using the nearest and safest exit route. All doors should be closed (but not locked) on leaving.
2. If possible take your personal belongings (such as handbags and briefcases) with you when you leave. Do NOT return to collect belongings.
3. In the case of a fire, do not use the lifts.
4. Assist any person with a disability or reduced mobility to leave the building. Use evacuation chairs to carry people down the stairs.
5. Walk quickly and calmly to the designated assembly area (see below) for your building or as advised by an Emergency Guide or Fire and Rescue Service personnel.
6. Remain at the assembly area (in groups) until instructed to leave by the TSO or Fire and Rescue Service personnel.
7. Do not re-enter the building until informed that it is safe to do so by the TSO or Fire and Rescue Service personnel.

Food and Refreshments

- Snacks: in the workshop rooms for morning and afternoon sessions!
  - Will try to rotate them out daily(!)
- CERN Restaurants rotate menu daily
  - R1: https://www.mynovae.ch/en/restaurant/13-restaurant-r1/
  - R2: https://www.mynovae.ch/en/restaurant/21-restaurant-r2-/
- Snacking Areas: open from Monday to Friday in buildings 6, 13, 30, 40, 54
- Vending Machines: maps.cern.ch map (accepts card and cash)
- Click-and-Collect: mynovae details (order ahead, pick-up later)

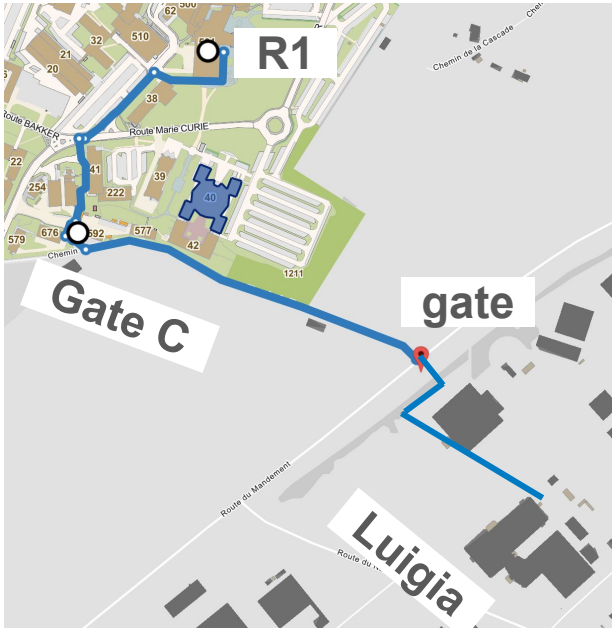
Social Dinner: Tuesday, 19h30

https://www.luigia.ch/en/academy/

Restaurant has wifi, password: happyluigia

Menu: https://menu.luigia.ch/menu/luigia

We will cover 50CHF/pp, order a la carte (drinks included), but you are responsible for anything over your allowance



Contains Celery n/a
If you see this symbol, the dish contains the indicated allergen.ry

Contiene Senape n/a
If you see this symbol, the dish contains the indicated allergen.

Contains Gluten n/a
If you see this symbol the contains the indicated alle

Contains Dairy n/a
If you see this symbol the dish contains the indicated allergen

Vegan n/a
This symbol indicates vegan product

VEGAN

Contains Traces Of Nuts n/a
If you see this symbol, the dish contains the indicated allergen

Contains Eggs n/a
If you see this symbol the contains the indicated alle

Contains Fish n/a
If you see this symbol the dish contains the indicated allergen

Vegetarian n/a
This symbol indicates vegetarian product

VEGETARIAN

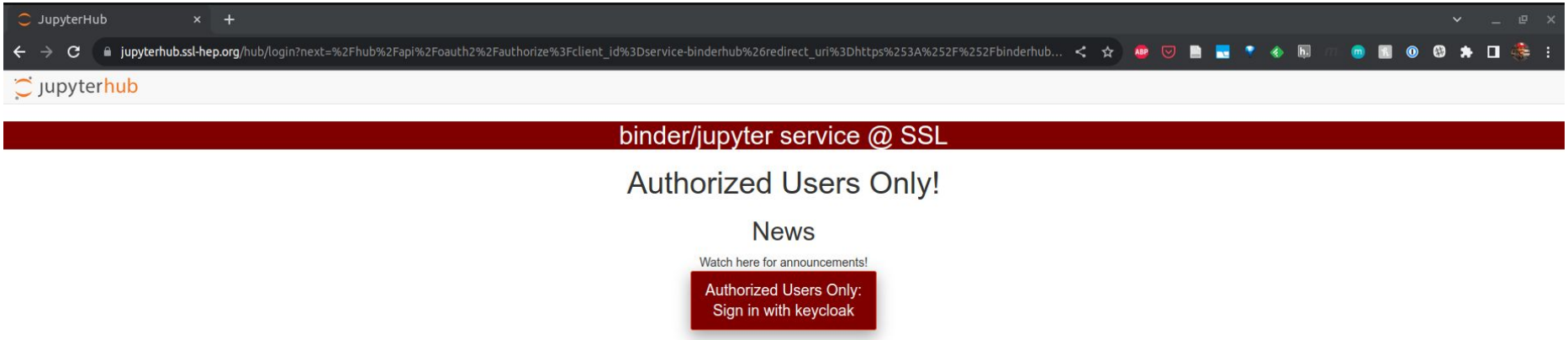
Contains Crustaceans
If you see this symbol the contains the indicated alle

Contains Molluscs n/a
If you see this symbol the dish contains the indicated allergen

SSL BinderHub / JupyterHub

- Thanks to the IRIS-HEP Scalable Systems Laboratory (SSL) for use of their BinderHub and JupyterHub instances
- These provide a JupyterHub based computing environment that allow for interactive computing and following talks and demos in real time
- https://binderhub.ssl-hep.org/
- https://jupyterhub.ssl-hep.org/
- Introduction to using BinderHub YouTube video

SSL BinderHub / JupyterHub login



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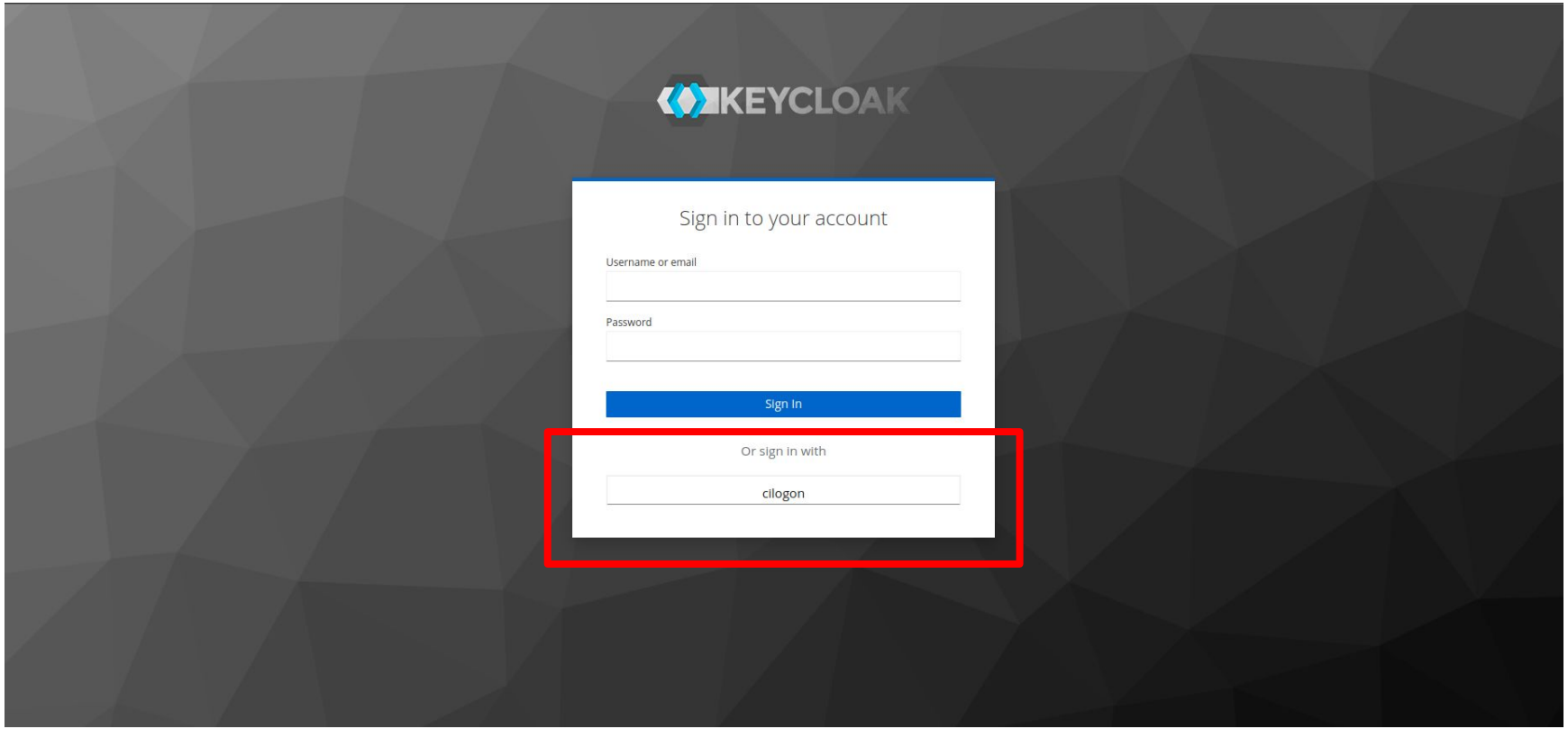

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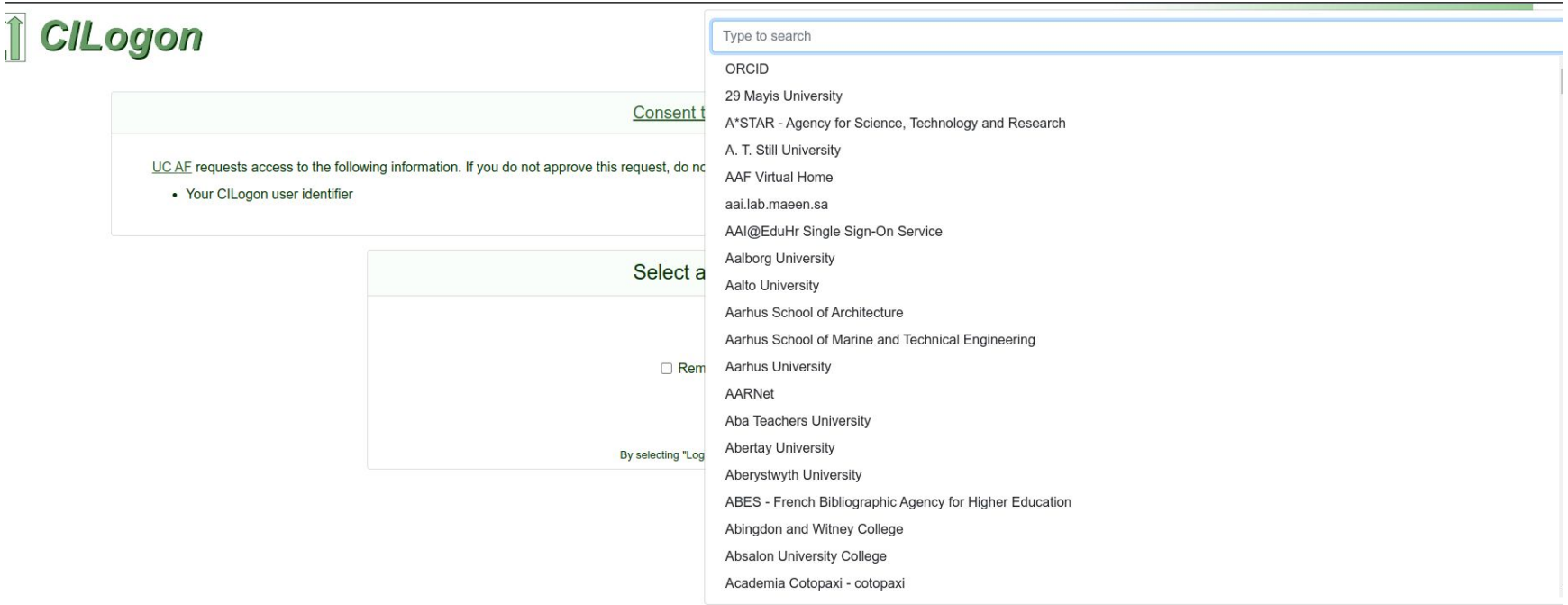

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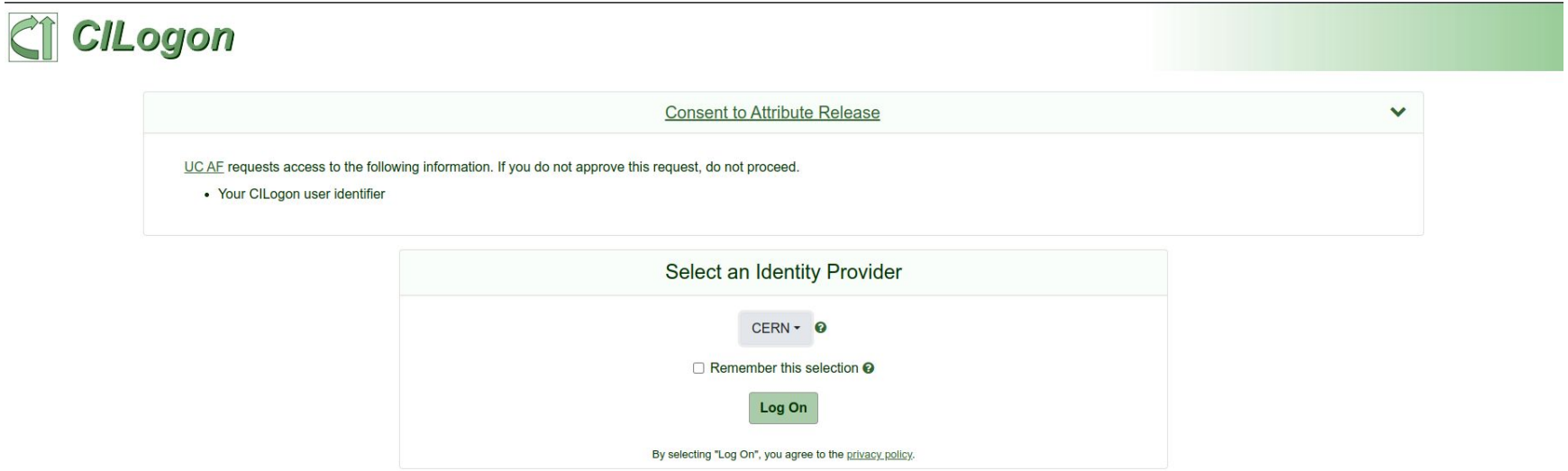
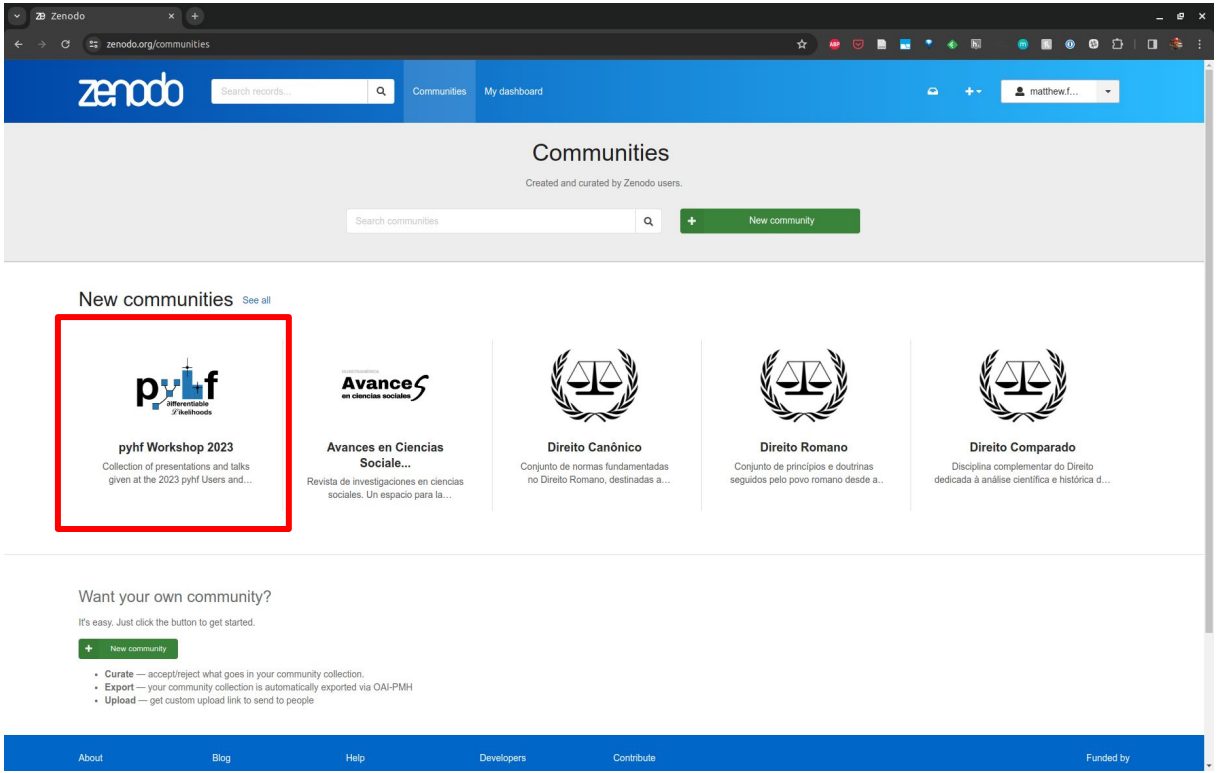


Zendo Community archive of workshop



zenodo.org/communities/pyhf-workshop-2023

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2023 Small Development Grant

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…and thanks to you