

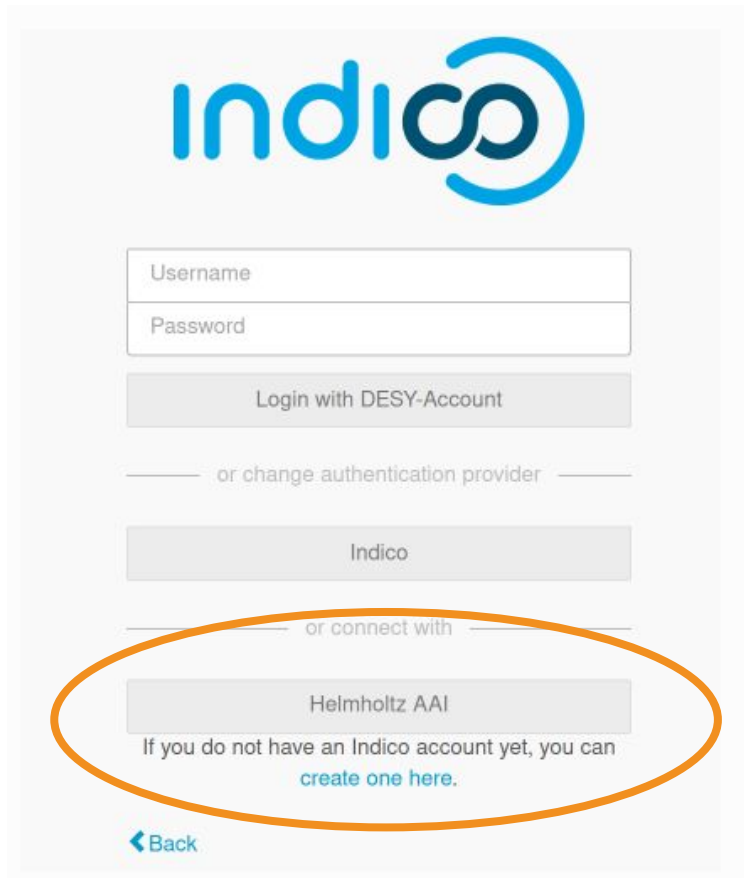
Intro and miscellanea

Federico Meloni (DESY)

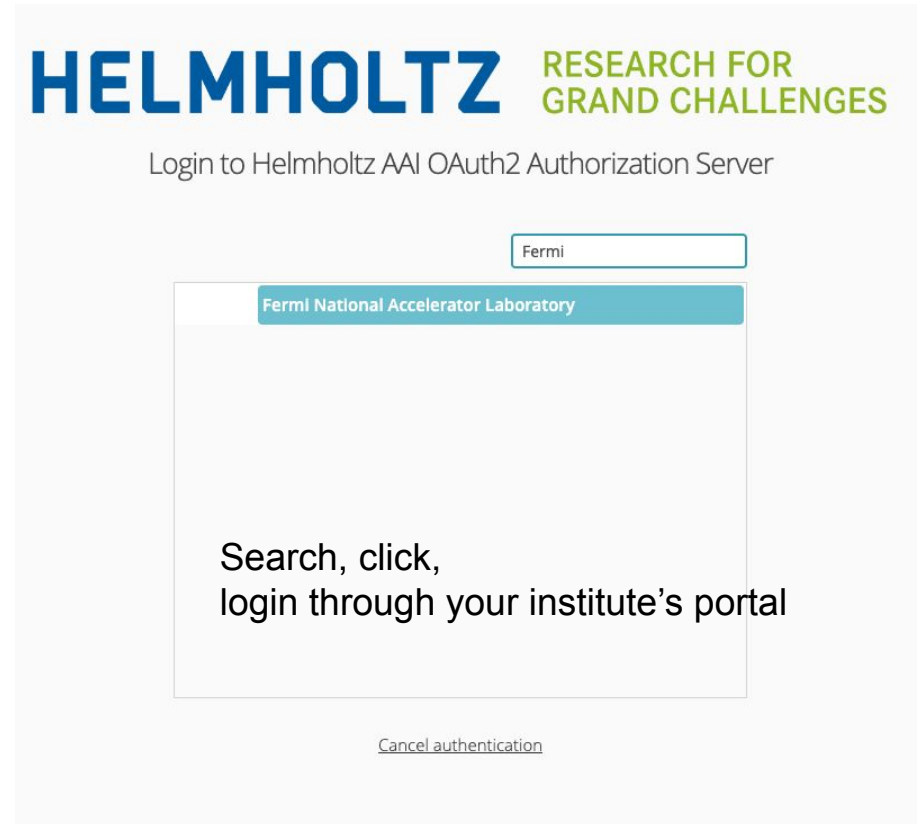
Informal detector team meeting
20/04/2023



Logging in DESY indico



The image shows the DESY indico login page. At the top is the indico logo. Below it are input fields for 'Username' and 'Password', followed by a 'Login with DESY-Account' button. A separator line with the text 'or change authentication provider' is below. Then there is an 'Indico' button. Another separator line with 'or connect with' follows. The 'Helmholtz AAI' button is circled in orange. Below it is a link: 'If you do not have an Indico account yet, you can [create one here.](#)' At the bottom left is a blue arrow pointing left with the text 'Back'.

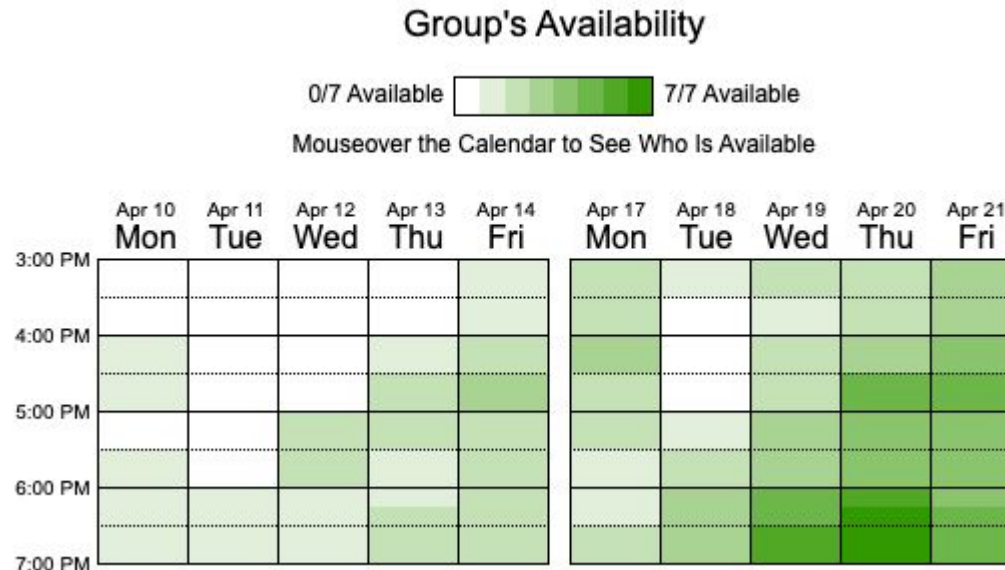


The image shows the HELMHOLTZ RESEARCH FOR GRAND CHALLENGES login page. At the top is the HELMHOLTZ logo and the text 'RESEARCH FOR GRAND CHALLENGES'. Below is the text 'Login to Helmholtz AAI OAuth2 Authorization Server'. There is a search bar with 'Fermi' entered. Below the search bar is a blue button labeled 'Fermi National Accelerator Laboratory'. In the center of the page is the text 'Search, click, login through your institute's portal'. At the bottom right is a link 'Cancel authentication'.

Full instructions at

<https://indico.desy.de/news/6-using-helmholtz-aai-as-login-method>

Time / frequency of the meeting



Stick to same slot?

- Bi-weekly? (or weekly cancelling whenever there is nothing to report?)

IMCC physics WG is going to start meetings (1 every 3 weeks) likely on Thursdays at 17:30 CET

Software, data and technicalia

gDoc with notes meant to be the living documentation:

<https://docs.google.com/document/d/1YBCttRKfxUpVErEqADR5hXOZUmc6VlaH2huvRlcrOjo/edit?usp=sharing>

- Sometime down the line we'll want to export mature bits into the MuC sw tutorial (<https://mcdwiki.docs.cern.ch/tutorial/>)

Data available at: /collab/project/snowmass21/data/muonc/fmeloni

Does anybody need an invite (or re-invite) to the github repos?

1. <https://github.com/madbaron/detector-simulation.git> (detector model, checkout branch KITP_10TeV)
2. <https://github.com/madbaron/SteeringMacros.git> (dd4hep and Marlin steering)
3. <https://github.com/madbaron/LCIOmacros.git> (analysis)
4. <https://github.com/madbaron/PLOTmacros.git> (plotting)

Shared overleaf <https://www.overleaf.com/2422854355bbsvwctkqjmf>

Tasks

Initial set, to be updated as we go

- Occupancy in tracker [[study_occupancy.py](#), [plot_occupancy.py](#), DONE (for slcio inputs)]
- Occupancy in calorimeter systems [[study_calor.py](#), work in progress]
- Source of calorimeter hits vs $R, z(, ?)$
- Basic track distributions [study_tracks.py](#) just “standard track distributions”
- Track reco efficiency vs R, θ
- Track momentum resolution
- Track fake rate vs R, θ
- Electron reco efficiency vs R, θ
- Photon reco efficiency vs R, θ
- Muon reco efficiency vs R, θ
- Jet multiplicity
- Jet selection efficiency vs R, θ
- Jet energy resolution vs R, θ

Thank you!