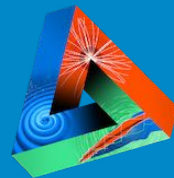




EUROPEAN AI FOR
FUNDAMENTAL PHYSICS
CONFERENCE
EuCAIFCon 2024

Welcome to the first European AI for Fundamental Physics Conference



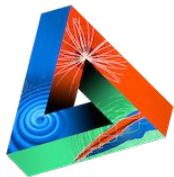
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Joint ECFA-NuPECC-APPEC Activities



**EUROPEAN AI FOR
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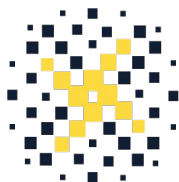
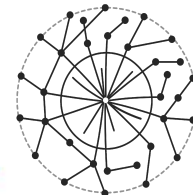
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Joint ECFA-NuPECC-APPEC Activities

Radboud Universiteit



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SISSA

DATA SCIENCE

Machine Learning for the Natural Sciences

SMARTHEP

NextGen



APPEC

ECFA



European Committee for Future Accelerators



SMASH

machine learning for science and humanities postdoctoral program



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Program overview

- Plenary talks (Tue - Fri, 8 summaries, 3 AI highlights)
- Plenary debates (Tue - Thu, 3 topics)
- Parallel sessions (Tue - Thu, 46 talks + 120 flash-talks / posters)
- Poster session (Wed + Thu)
- EuCAIF workgroup kick-off discussions (Tue - Thu)
- Evening debate (Wed)
- Conference dinner (Thu)

Multiple ways to access the program:

- Indico timetable
- Searchable timetable (link on indico)
- Mobile phone app (link on indico)





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EuCAIF workgroups

Proposed workgroups

- 1) Foundation models & discovery (Tue)
- 2) AI-assisted co-design of future ground- and space-based detectors (Tue)
- 3) FAIR-ness & Sustainability (Wed)
- 4) JENA WP4: Machine Learning and Artificial Intelligence (Thu)
- 5) Building bridges: Community, connections and funding (Tue)


=> See indico for more detailed descriptions <=




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Insert cards


<https://bit.ly/eucaifcon24-insert-cards>

**Christoph**
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s.wagner@uni-heidelberg.de, <https://gitlab.com/chrwagner>
My research:
Astroparticle physics, C
methods, Machine Learn
inference, Generative m

My expertise is:

**Tilman Plehn**
Professor of Theoretical Physics
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My research:
LHC physics, Higgs physics, phy
Standard Model, LHC simulation

My expertise is:
QCD, LHC Physics, Higgs Physics, Machine Learning at the LHC

**Tobias Golling**
UNIVERSITÉ DE GENÈVE
FACULTY OF SCIENCE
My expertise is:
LHC: new physics, top, flavor-tagging, boosted jets
ML: surrogate models, flows, diffusion, GNNs

My name

My expertise is:
...

A problem I'm grappling with:
...

I've got my eyes on:
...

I want to know more about:
...

My research:
...

Profession / institute / email / web page / ...

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Tuesday announcements

Announcements

- Coffee buffets are open the entire day
- For those joining the Wednesday & Thursday evening: you will receive an e-mail with directions on the day of the program
- Download the conference app! 'HEPCon'
- Registration desk: If you have any questions please come to the registration & information desk desk
- Please use the hashtag #eucaifcon24 on social media