



# **AI and the Uncertainty Challenge in Fundamental Physics**

Introduction to second part



David Rousseau (IJCLab) for the scientific  
committee



# L'Institut Pascal (IPa)

a place dedicated to workshops

- offices upstairs for (almost) everyone
- some of you have offices with their name
- otherwise pick an office which looks free
- use at will the small meetings room or site

# Program

*(all slides available before talks on indico agenda)*

- ❑ Monday PM : Opening session, Uncertainty Quantification
- ❑ Tuesday AM : Explainable AI
- ❑ end of Tues AM, Tuesday PM : Simulation-Based Inference  
(we switch to Institut Pascal Paris-Saclay)
- ❑ Wednesday AM : Data frugal approaches, Data-centric AI
- ❑ End of Wed AM : Benchmarks dataset and challenges
- ❑ Wednesday PM : Fair Universe hackathon
- ❑ Thu AM Unfolding / de-biasing
- ❑ End of Thu AM, Thu PM Controlling uncertainties in generative models
- ❑ Fri AM Architectures
- ❑ Fri PM Closing session
- ❑ Summary of AISSAI Machine Learning Assisted Sampling (Wed AM)
- ❑ Summary of AISSAI Thematic Quarter on Causality (Fri PM)

# Social Events

- ❑ Lunch buffet every day (except Monday)
- ❑ Welcome cocktail 6PM today
- ❑ Buffet lunch at Institut Pascal Wed-Thu-Fri
- ❑ Workshop dinner Thursday 7PM Brass & co
  - People staying around at IPa we'll walk there en masse leaving IPa entry hall at 6:45PM
  - Some cancellation, let me know if you're interested
  - If registered and changed your mind, please un-tick your registration on the agenda, so that your seat can be reallocated

# slack

- ❑ Primary channel of communication
- ❑ Make sure you're connected (ask your neighbour)
- ❑ #general : for announcements
- ❑ #organisers\_open : practical issues
- ❑ #random : tourism, outing, whatever.g.
- ❑ Use slack for scientific exchanges, one channel per session :  
#sci\_<n>\_<session name>

The screenshot displays a Slack interface for the workspace 'AIUPHYS2023'. The left sidebar lists several channels: #général (selected), #aléatoire, #fair-universe-hackathon, #organisers-closed, #organisers-open, #sci\_1\_uncertainty\_quantific..., #sci\_2\_explainable\_ai, #sci\_3\_simulation\_based\_inf..., #sci\_4\_data\_frugal, #sci\_5\_benchmarks, #sci\_6\_unfolding, #sci\_7\_generative\_models, #sci\_8\_architectures, #sci\_9\_closing\_session, and an option to 'Ajouter des canaux'. The main channel view is for '# général'. It features a search bar at the top, a notification 'Vous regardez le canal # général', and a description: 'C'est le seul canal où tout le monde se retrouve. C'est l'endroit idéal pour faire des annonces et mener vos conversations d'équipe.' Below this are buttons for 'Ajouter des collègues' and 'Transférer les e-mails sur ce canal'. A timeline shows a message from David Rousseau at 20h30: 'a rejoint #général. D'autre part, Ragansu Chakkappai et 18 autres personnes l'ont rejoint.' Another message from Thomas Vuillaume at 11h03 says 'Bonjour à tous !'. A third message from David Rousseau at 11h49 provides event details: 'Welcome ! We'll start at 2PM in Amphi 25, with coffee available from 1PM in the Patio. Directions in <https://indico.in2p3.fr/event/30589/page/3556-venue-accommodation-and-social-events>'. Below this is a link to 'IN2P3 Events Directory (Indico)' and a section titled 'Artificial Intelligence and the Uncertainty challenge in Fundamental Physics' with a paragraph of text.

# Zoom



- ❑ Zoom in meeting mode (no waiting room, everyone sees every one else connection)
  - Link, meeting ID and code distributed on slack
  - Please do not advertise beyond workshop and conference
- ❑ Zoom chat (volatile) only to be used for connection issues
- ❑ Raise hand before asking your question
- ❑ Talks will be recorded through zoom, and uploaded on indico agenda (and possibly on a future AISSAI YouTube channel)

# Sponsors

