Reinforcement Learning for
Autonomous Accelerators

RL4AA

RL4AA'25
COLLABORATION
WORKSHOP

2–4 April 2025
DESY (Hamburg, Germany)

JOIN NOW!

Reinforcement learning is a powerful learning paradigm of machine learning that holds a lot of promise for **particle accelerators**. Join us in our yearly workshop to learn, discuss, and network!

RL challenge
Get your hands dirty with RL in small teams, write some code, and possibly win a prize.

Contributed talks
Enjoy targeted and specialised talks on different RL applications and methods.

Posters
Discuss your work and find out what others are working on in a poster session.

Introduction to RL
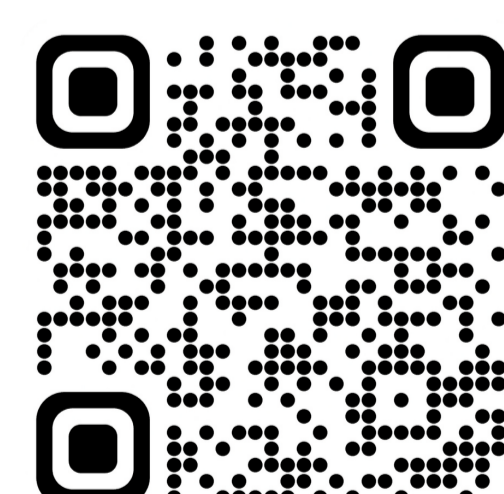Get a beginner-friendly introduction to foundational RL concepts and advanced topics.

KEYNOTE
SPEAKERS

Jan Peters
Professor for Intelligent Autonomous Systems
TU Darmstadt

Alessandro Pau
Research Scientist
Swiss Plasma Center
EPFL

Register!

Join our Discord server!

CALL FOR ABSTRACTS IS OPEN!

You can submit for:
- Contributed talk
- Poster

Organising Institutions

DESY. | KIT Karlsruher Institut für Technologie | UNIVERSITY OF LIVERPOOL | The Cockcroft Institute of Accelerator Science and Technology

Funding

AKADEMIE DER WISSENSCHAFTEN IN HAMBURG | GÖ-Z-PROFIN | DASHH.

TUHH Hamburg University of Technology | CERN | PARIS LODRON UNIVERSITÄT SALZBURG | IDA LAB INTELLIGENT DATA ANALYTICS SALZBURG | CSSB Centre for Structural Systems Biology | Hamburg Behörde für Wissenschaft, Forschung, Gleichstellung und Bezirke | Bundesministerium für Bildung und Forschung

RL4AA'25 Organizing Committee

Annika Eichler (DESY)
Jan Kaiser (DESY)
Christian Hespe (DESY)
Simon Hirlaender (University of Salzburg)
Andrea Santamaria Garcia (University of Liverpool)
Chenran Xu (Karlsruhe Institute of Technology)
Borja Rodriguez Mateos (CERN)

https://rl4aa.github.io/RL4AA25/