

# Working Group on Physics, Modern IT and Artificial Intelligence Arbeitskreis Physik, moderne Informationstechnologie und Künstliche Intelligenz (AKPIK)

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## Overview of Invited Talks and Sessions

(Lecture hall ZEU/0118; AI Topical Day HSZ/AUDI, HSZ/0004, and joint sessions; Poster HSZ OG2)

### Plenary Talks of the AI Topical Day

PV XIII	Thu	9:00– 9:45	HSZ/AUDI	<b>The role of artificial intelligence in modern radiation therapy</b> — •GUILLAUME LANDRY
PV XIV	Thu	9:45–10:30	HSZ/AUDI	<b>Machine Learning Advances in Particle Physics</b> — •LUKAS HEIN- RICH

### Invited Talks

AKPIK 6.1	Thu	11:00–11:30	HSZ/AUDI	<b>AI Techniques for Event Reconstruction</b> — •IVAN KISEL
AKPIK 6.2	Thu	11:30–12:00	HSZ/AUDI	<b>Accelerator operation optimisation using machine learning</b> — •PIERRE SCHNIZER
AKPIK 6.3	Thu	12:00–12:30	HSZ/AUDI	<b>Is this even physics? – Progress on AI in particle physics</b> — •GREGOR KASIECZKA

### Sessions

AKPIK 1.1–1.5	Mon	16:00–18:00	HSZ OG2	<b>Poster</b>
AKPIK 2.1–2.8	Tue	17:00–19:00	ZEU/0118	<b>Applications in Particle and Astroparticle Physics</b>
AKPIK 3.1–3.6	Wed	14:00–15:30	ZEU/0118	<b>Neural Networks I</b>
AKPIK 4.1–4.5	Wed	15:45–17:00	ZEU/0118	<b>Neural Networks II</b>
AKPIK 5.1–5.3	Wed	11:00–12:20	ZEU/0250	<b>AI Topical Day – Neural Networks and Computational Complexity (joint session MP/AKPIK)</b>
AKPIK 6.1–6.3	Thu	11:00–12:30	HSZ/AUDI	<b>AI Topical Day – Invited Talks (joint session AKPIK/HK/ST/T/AKBP)</b>
AKPIK 7.1–7.6	Thu	14:00–15:30	HSZ/0101	<b>AI Topical Day – Research Data Management and Medical Applications</b>
AKPIK 8.1–8.6	Thu	15:45–17:15	HSZ/0004	<b>AI Topical Day – Normalizing Flows and Invertible Neural Networks (joint session AKPIK/T)</b>
AKPIK 9.1–9.6	Thu	17:30–19:00	HSZ/0004	<b>AI Topical Day – New Methods (joint session AKPIK/T)</b>
AKPIK 10.1–10.6	Thu	14:00–15:30	HSZ/0103	<b>AI Topical Day – Computing II (joint session HK/AKPIK)</b>
AKPIK 11.1–11.6	Thu	14:00–15:30	ZEU/0146	<b>AI Topical Day – AI in Medicine (joint session ST/AKPIK)</b>
AKPIK 12.1–12.6	Thu	14:00–15:30	HSZ/0105	<b>AI Topical Day – Heavy-Ion Collisions and QCD Phases (joint session HK/AKPIK)</b>