

Lecture Series

Philosophy of Science and Machine Learning

In an age where artificial intelligence (AI) is transforming science, it becomes increasingly important to reflect critically on the foundations, methodologies, and implications of these advancements. This lecture series will investigate fundamental issues in AI from the vantage point of philosophy of science, which includes topics such as the transparency and interpretability of AI within scientific research, as well as the impact of AI on scientific understanding and explanation.

Time & Place: Thursdays, 4:15 pm, room 303, Joseph-von-Fraunhofer-Str. 25, 44227 Dortmund

Speakers

17.10.24 André Curtis-Trudel (University of Cincinnati)

“On finding what you’re (not) looking for: prospects and challenges for AI-driven discovery”

28.11.24 Tim Rüz (University of Bern)

“The Concept of Memorization in Machine Learning”

12.12.24 Stefan Buijsman (TU Delft)

“The impact of epistemic dependence on AI for understanding”

23.01.25 Nina Poth (Radboud University Nijmegen)

“Common Sense and the Limits of AI”

Register for online participation here:



This lecture series is a special edition of the AI Colloquium at TU Dortmund University, coorganized by the Lamarr Institute for Machine Learning and Artificial Intelligence, the Research Center Trustworthy Data Science and Security (RC Trust), and the Center for Data Science & Simulation at TU Dortmund University (DoDas). The lecture series is organized by the Emmy Noether Group “UDNN: Scientific Understanding and Deep Neural Networks”, and generously funded by the German Research Foundation (DFG; grant 508844757).