

AUSTRIAN
ACADEMY OF



INVITATION TO THE FOURTH TALK OF THE PUBLIC LECTURE SERIES ÖAW – IST AUSTRIA LECTURES

CAN EUROPE CATCH UP IN ARTIFICIAL INTELLIGENCE?

BERNHARD SCHÖLKOPF

Max-Planck-Institute for Intelligent Systems, Tübingen

WELCOME

THOMAS HENZINGER

President, IST Austria

ANTON ZEILINGER

President, Austrian Academy of Sciences

IST Austria and the Austrian Academy of Sciences have initiated a joint lecture series aiming to bring to Austria speakers of the highest international standing active in fields that are of mutual interest to both institutions and to a wider public. The lecture series will be continued by Bernhard Schölkopf, Director at the Max Planck Institute for Intelligent Systems in Tübingen.

Bernhard Schölkopf's scientific interests are in machine learning and causal inference. He has applied his methods to a number of different fields, ranging from biomedical problems to computational photography and astronomy. He is a member of the German Academy of Sciences (Leopoldina), has received the J.K. Aggarwal Prize of the International Association for Pattern Recognition, the Academy Prize of the Berlin-Brandenburg Academy of Sciences and Humanities, the Royal Society Milner Award, and is an Amazon Distinguished Scholar.

This first ÖAW IST Austria Lecture that takes place at IST will focus on the status quo of AI research. Progress in autonomous vehicles and digital assistants shows that today's machines can perform certain human tasks with remarkable accuracy. This has led to a gold rush mentality around AI, yet a critical assessment suggests that current technologies still lack versatility and only work within limited domains. Transfer of knowledge, common sense, and an understanding of causality are open problems. These limitations are related to how we perform machine learning, the technology powering AI: existing methods build on statistics, but one can also try to go beyond this, assaying causal structures underlying statistical dependences. Can causal knowledge help machine learning tasks, by being more robust to changes that occur in real world datasets? This is but one example of the open issues in current AI research. With the constant stream of talented young scientists flocking into machine learning, significant developments are to be expected. We will discuss how Europe can partake in these developments by playing an active role in public AI research. AI technologies have the potential to improve our lives. The development is still in its infancy, and we should ensure that the highest level of research in this field will continue to be performed in the open societies of Europe.

The talk will conclude with a Q&A followed by a reception.

Please register by May 28 and find information on free shuttle buses to IST Austria *here*.

THURSDAY, JUNE 6, 2019 6 – 7 P.M. IST AUSTRIA, RAIFFEISEN LECTURE HALL AM CAMPUS 1, 3400 KLOSTERNEUBURG