



Programme

Welcome

Liesbeth Venema, Chief Editor of Nature Machine Intelligence

Talks

The Philosophy of (Artificial) Intelligence

Norman Sieroka, Managing Director Turing Centre Zurich

Intuitive Machines

Mateja Jamnik, Reader in Artificial Intelligence, University of Cambridge

Drug Design of the Future

Gisbert Schneider, Professor of Computer-assisted Drug Design, ETH Zurich

Bespoke AI: From Science to Business

Kevin Schawinski, Co-Founder at Modulos AG

Artificial Intelligence: The Global Policy Response

Sophie-Charlotte Fischer, PhD candidate, ETH Zurich

Moderated discussion, Q&A

Networking Reception

Social Media:

Twitter: @ETH_en

Facebook: @global.ethz.ch

#ETHZurich #BerlinSciWeek18

Man and Machine

Tuesday, 6 November 2018

18.00 h

Musikbrauerei

Greifswalder Str. 23A, 10405 Berlin



Artificial Intelligence (AI) seems to be everywhere today – with applications in almost all fields of modern science. From robotics and biology to chemical engineering and healthcare, applying AI positions most scientific fields for progress. What exactly is AI? Will AI change the scientific discovery process? Are we ready to take advantage of AI and understand its impact on science and society? Governments increasingly view AI as the main driver of future growth, competitiveness, and national security.

While the policy responses to AI differ significantly across countries, so far, they share the ultimate goal of securing a top spot in this emerging field. This special symposium brings together leading experts to unveil the mystery that often shrouds these technologies and present stellar AI-enabled advances in various fields of science. Researchers from ETH Zurich and other institutions will present various facets of AI and openly discuss conceptual opportunities, but also point to its current practical and abstract limitations.



Gisbert Schneider is a full professor at ETH Zurich, holding the Chair for Computer-Assisted Drug Design, and the Associate Vice President for ETH Global. He received his PhD in Biochemistry from Freie Universität Berlin. He then joined Roche Pharma in Basel as a cheminformatics group leader. From 2002 to 2009, he was a full professor at Goethe-University in Frankfurt (Beilstein Endowed Chair). His research focuses on the integration of artificial intelligence into practical medicinal chemistry.



Kevin Schawinski is an astrophysicist who studied and worked at Cornell, Oxford, Yale and ETH Zurich. His academic research focused on the evolution of galaxies and supermassive black holes where he pioneered the use of citizen science and artificial intelligence. In 2018, he co-founded Modulos, an AI company offering state-of-the-art machine learning solutions for corporate customers.



Mateja Jamnik is developing AI techniques for human-like computing - she models how people solve problems to enable machines to reason in a similar way to humans. She applies AI and reasoning techniques to medical data to advance personalised cancer medicine. Mateja is passionate about bringing science closer to the public and engages frequently with the media and public science events. She has been advising the UK government on policy direction in relation to the impact of AI on society.



Norman Sieroka is the managing director of the Turing Centre Zurich and belongs to the core team of ETH's critical thinking initiative. He studied philosophy, physics, and mathematics in Heidelberg and Cambridge and received doctorates in both physics and philosophy. Norman Sieroka held positions as a guest professor at the Universities of Notre Dame (U.S.) and Bremen. His research focuses on conceptual questions regarding the exact sciences, the mind, and time.



Sophie-Charlotte Fischer is a PhD candidate in Political Science at the Center for Security Studies at ETH Zurich. Currently, she is a visiting researcher with the Governance of Artificial Intelligence Program at the University of Oxford. Her research looks at the ways in which Artificial Intelligence disrupts conventional frameworks for understanding International Relations and the implications of this for national and global security, order and governance.