



Programme

Welcome and Introduction

Shalini Trefzer, Contributing Editor, Diplomatic Courier

Talks

Olga Fink (ETH Zurich)

Artificial Intelligence: Learning the Unknown

Gisbert Schneider (ETH Zurich)

Rethinking drug discovery in the artificial intelligence era

Norman Sieroka (Universität Bremen & The Turing Centre at ETH Zurich)

Applied Philosophy of Artificial Intelligence

Alexis Block (ETH Zurich)

Emotional Intelligence: Equipping Robots with a different kind of Artificial Intelligence

Sophie-Charlotte Fischer (ETH Zurich)

The Global Politics of Artificial Intelligence

Q&A

Social Media:

Twitter: @ETH_en

Facebook: @global.ethz.ch

#ETHZurich #BerlinSciWeek19

Man and Machine

Thursday, 7 November 2019

18.00 h

Museum für Naturkunde, Tristan Lounge
Invalidenstraße 43, 10115 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. AI will surely change the scientific discovery process, but are we ready to take advantage of AI and do we really understand its impact on science and society?

This symposium brings together leading experts who will not only unveil the mystery that often shrouds new technologies, but also present stellar AI-enabled advances in various fields of science. Researchers from ETH Zurich and other institutions will introduce various facets of AI and openly discuss conceptual opportunities, as well as point to the technology's current practical and abstract limitations.



Shalini Trefzer expands the business and reach of young and emerging companies of the future, from start-up to scale-up; most of whom are applying artificial intelligence to solve problems in various market segments. Originally from the US, she spent more than a decade working in San Francisco for companies such as Cisco Systems, before moving to Switzerland in 2008. There, she worked for six years as a corporate finance and operations professional in drug development, before branching off on her own into the field of AI-driven business applications. Shalini is honored to serve as the Executive Director of the Diplomatic Courier's World in 2050 Think Tank.



Alexis E. Block earned her B.S.E. in Mechanical Engineering and Applied Mechanics (with honors), the Student Award of Merit, and her M.S.E. in Robotics from the University of Pennsylvania in 2016 and 2017, respectively. Her research blends physical human-robot interaction, social robotics, and haptics. Her work with HuggieBot, the robot she designed to hug people, garnered significant media attention in 2018 and 2019, including news articles by IEEE Spectrum, The Times, and NBC News.



Olga Fink is SNSF (Swiss National Science Foundation) professor of intelligent maintenance systems at ETH Zürich. Olga is also a research affiliate at the Massachusetts Institute of Technology. The core of her research is the development of intelligent algorithms to improve performance, reliability and availability of complex industrial assets and making their maintenance more cost efficient.



Sophie-Charlotte Fischer is a PhD candidate in Political Science at the Center for Security Studies at ETH Zurich and an affiliated researcher with the Center for the Governance of Artificial Intelligence 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.



Gisbert Schneider is a full professor at ETH Zurich, holding the Chair for Computer-Assisted Drug Design. His research focuses on the integration of machine intelligence into practical medicinal chemistry. His career has led him from the pharmaceuticals division at Roche to academia, initially to the Goethe-University in Frankfurt where he held the Beilstein Endowed Chair for Chem- and Bioinformatics, and then to his current position at ETH in Zurich.



Norman Sieroka is Professor of Philosophy at the University of Bremen. He is a member of the Directory Board of ETH's Turing Centre Zurich and of the Governance Board of ETH's "RETHINK" initiative. He studied philosophy, physics, and mathematics in Heidelberg and Cambridge and received doctorates in both physics and philosophy. His research focuses on conceptual questions regarding the exact sciences, the mind, and time.