

# HPI Colloquium

## 21.02.2019, 4 p.m.

Hasso-Plattner-Institut, Hörsaalgebäude, Hörsaal 1  
Campus Griebnitzsee, 14482 Potsdam

## “Artificial Intelligence: Does It Require A Body?”

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### Abstract

Intelligence is of great importance in our society. But intelligence also remains mysterious and is notoriously difficult to reproduce in technological artifacts. So far, every attempt to produce an intelligent machine—for example: Deep Blue, Watson, or AlphaGo—has brought about important technological progress but has failed to significantly advance our understanding of biological intelligence. Why does there seem to be such a wide gap between artificial intelligence and biological intelligence? Maybe the artificial intelligences are missing something. Maybe they are missing a body? And maybe therefore our next attempt to build a truly intelligent machine should take the form of a robot? I will argue that this is a good idea and show attempts of moving towards this goal. However, rather than creating an apocalyptic robotic overlord who will end all of humanity, I will advocate to first go after a much more humble (and maybe more realistic) objective, namely, to attempt to replicate the surprising abilities of cockatoos.

### Short CV

Oliver Brock is the Alexander-von-Humboldt Professor of Robotics at the Technische Universität Berlin. He received his Ph.D. from Stanford University in 2000. He held post-doctoral positions at Rice University and Stanford University. Starting in 2002, he was an Assistant and then Associate Professor at the University of Massachusetts Amherst, before moving back to the Technische Universität Berlin in 2009. His research focuses on manipulation, perception, soft material robotics, interactive machine learning, deep learning, and motion generation. He is an IEEE Fellow and president of the Robotics: Science and Systems foundation.

Host: Prof. Dr. Tobias Friedrich