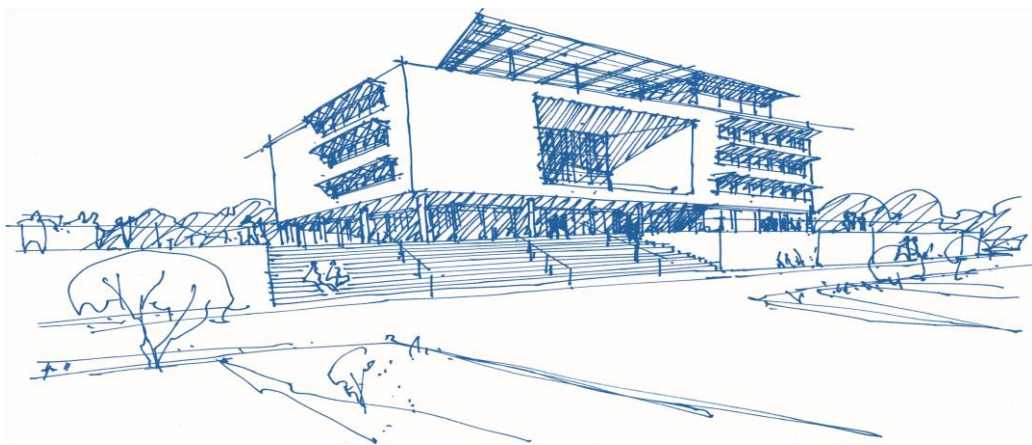


Philosopher in Residence Fellowship Program (Prof. Roberto Giuntini)  
Focus Group: Quantum Logic and the Second Quantum Revolution

# Seminar Series Quantumness: from Logic to Engineering and back



## Venue:

Institute for Advanced Study  
Lichtenbergstraße 2a  
Room 0.004 (ground floor)

For any question, contact  
[roberto.giuntini@tum.de](mailto:roberto.giuntini@tum.de)  
Zoom link on request

**Tuesday, July 09<sup>th</sup> 2024, 15:00-16:00**

**15:00 –16:00 Prof. Majid Khadiv (TUM)**

## *Intelligent humanoid robots and potential ethical issues*

**Abstract -** Thanks to the recent advancement in software and hardware, intelligent humanoid robots nowadays are closer to become a reality. This technology can change our lives and society for good, but inevitably, it will come with new barriers. In this talk, I will try to explain my research on decision making for robotic systems through the lens of optimal control and reinforcement learning in an understandable way for non-roboticists. Then, I will present how humanoids can impact our lives for good in the future, but it is always important to have in mind that good intentions do not necessarily lead to desirable results. Hence, I will present the potential ways that things could go wrong and affect our society negatively.

**Short bio -** Majid Khadiv is an assistant professor in the school of Computation, Information and Technology (CIT) at the Technical University of Munich (TUM), Germany. He leads the chair of "AI Planning in Dynamics Environment" at TUM and is also a member of the Munich Institute of Robotics and Machine Intelligence (MIRMI). Prior to joining TUM, he was a research scientist at the Empirical Inference department at the Max Planck Institute for Intelligent systems. Before that he was a postdoctoral researcher in the Machines in Motion, a joint laboratory between New York University and Max Planck Institute. Since the start of his PhD in 2012, he has been performing research on motion planning, control and learning for legged robots ranging from quadrupeds, lower-limb exoskeleton up to humanoid robots.

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