

NITheP Colloquium

Monday, 30 November 2020, 16h00

Dr Stefan Woerner
IBM Research



Towards Quantum Advantage in the Financial Service Sector

Abstract: Quantum computing promises speed-ups for several applications relevant in the financial service sector. In this talk, we will discuss some quantum algorithms to speed up Monte Carlo simulation as well as quantum heuristics for combinatorial optimization. Further, applications such as option pricing, credit risk analysis, and portfolio management will be analyzed with respect to their potential quantum advantage and requirements to achieve it.

Bio: Dr. Stefan Woerner is the Global Lead for Quantum Applications Research & Software in IBM Quantum and a Research Staff Member in the Quantum Technologies group of the Science & Technology department at IBM Research - Zurich. He received a Master of Science in Applied Mathematics from ETH Zurich in 2010, and a Doctor of Sciences in Operations Management from ETH Zurich in 2013 for his thesis on Convex Optimization in Supply Chain Management. The focus of his research is the development and analysis of quantum algorithms for optimization, simulation, and machine learning as well as their practical applications, particularly in finance or supply chain management.

Register in advance for this webinar:

https://ukzn.zoom.us/webinar/register/WN_aO117SiLSpevNBqkmlXEKw

After registering, you will receive a confirmation email containing information about joining the webinar.

Date: Monday, 30 November 2020

Time: 16h00