

Abbe Center of Photonics | JENA

Friedrich-Schiller-Universität

ACP/ASP Guest Lecture

Dr. Marc MATTINGLEY-SCOTT (IBM Quantum)

Mark Mattingley-Scott has a Bachelor of Science with Joint Honours in Computing and Electronics, and a Doctor of Philosophy on Code Division Multiple Access Local Area Networks from the University of Durham, combined with 34 years' experience in innovation and research.

As a Principal at IBM he is specialised in the identification, nurturing and development technological innovation, with a primary focus on Big Data Analytics, Neuromorphic Computing and Quantum Computing. He has developed several new business areas and transferred these into IBM's services and solutions business. He is an active member of IBM's worldwide patent assessment



team, and the IBM Student Admissions and Supervision program. Since its inception in 2017, he has been a leading member of IBM's Quantum Ambassador team, responsible for raising awareness of Quantum Computing and developing business opportunities throughout EMEA.

He currently teaches human & machine learning at the Institute for Cognitive Science at the University of Osnabrück. He was a member of staff at the University of Frankfurt where he taught Cognitive Science and Media Anthropology, at the University of Applied Sciences in Mannheim where he taught Intercultural Management and IT Management and the Ludwig-Maximilian's University in Munich where he taught Analytical Methods.

He is a director of the Frankfurt Institute for New Media and a senior member of the IEEE. having founded the German chapter of the Systems, Man and Cybernetics Society, and chair of the IEEE Public Policy Committee subgroup on Quantum Computing. He is the Chairman of the Big Data work group at BITKOM, the German IT and Telecomm. Industry Association.

Quantum Computing

Tuesday, November 10, 2020. 2:00 pm ACP Lecture Hall, Albert-Einstein-Str. 6, 07745 Jena* https://uni-jena-de.zoom.us/skype/96384983974 (password: "seminar")

Quantum Computing - a technology with its roots in the revolution in physics in the early 20th century, came of age in 1994 when Peter Shor discovered a way to solve a hard algebraic problem easily - since then we have observed astounding growth in the power of quantum computers and in the development of algorithms. IBM launched the Quantum Experience in 2016, and the IBM Q Network in 2017, and this year announced an ambitious roadmap to achieve over 1000 qubits within 3 years. In my talk I will discuss what makes Quantum special and what the implications of this technology might be.