

# BMBF Networking Event Quantum Computing (Hall A4)

Tuesday, 26 <sup>th</sup> April 2022		Wednesday, 27 <sup>th</sup> April 2022		Thursday, 28 <sup>th</sup> April 2022		Friday, 29 <sup>th</sup> April 2022	
13:30–13:45	Opening	10:00–11:20	Quantum Processor Projects 1	10:00–11:00	Technical Challenges for Quantum Computing 1	10:00–11:00	Technical Challenges for Quantum Computing 2
Bundesministerium für Bildung und Forschung		FermiQP   Fermion Quantum Processor Prof. Dr. Christian Groß Universität Tübingen		Challenges for Superconducting QC Prof. Dr. Stefan Filipp TU München		Challenges for Trapped Ion QC Prof. Dr. Christian Ospelkaus Leibniz Universität Hannover	
13:45–14:45	Quantum Computer Demonstration Setup Projects 1	QRydDemo   Quantum Computing with Rydberg Atoms Prof. Dr. Tilman Pfau Universität Stuttgart		Challenges for Semiconductor QC Prof. Dr. Hendrik Bluhm Forschungszentrum Jülich		Challenges for Neutral Atom QC Prof. Dr. Florian Meinert Universität Stuttgart	
Q-Exa   Quantum Computing Extension of Exascale-High-Performance-Computing Dr. Markus Weber IQM Germany GmbH		IQuAn   Ion Quantum Processor with High Performance Computing Connection Prof. Dr. Ferdinand Schmidt-Kaler QUANTUM Uni Mainz		Challenges for NV Center QC Dr. Peter Knittel Fraunhofer IAF		Challenges for Photonic QC Dr. Gwenaëlle Vest Q.ant GmbH	
QSolid   Quantum Computer in the Solid State Prof. Dr. Frank Wilhelm-Mauch Forschungszentrum Jülich		MIQRO   Scalable Quantum Computer with High-Frequency Controlled Stored Ions Prof. Dr. Christof Wunderlich Universität Siegen		Coffee		Coffee	
MuniQC-SC   Munich Quantum Valley Superconducting Quantum Computing Demonstrator Prof. Dr. Stefan Filipp TU München		Coffee		11:20–12:20	Enabling Technologies for Quantum Computing Projects 1	11:10–12:10	Enabling Technologies for Quantum Computing Projects 3
Coffee		11:30–12:10		HIQuP   Highly Integrated and Scalable Interface Circuits for Quantum Processors Dr. Ronny Stolz Leibniz-Institut für Photonische Technologien		EVAQS   Enabling Vacuum Technologies and Feedthroughs for Advanced Quantum Systems Dr. Bernhard Luckscheiter Allectra GmbH	
15:00–16:40	Quantum Computer Demonstration Setup Projects 2	Quantum Processor Projects 2		QuMIC   Qubits Control by Microwave Integrated Circuits Prof. Vadim Issakov TU Braunschweig		Qzell   Highly Transparent Antireflective Coatings for Quantum Experiments Dr. Ulrike Schulz Fraunhofer IOF	
MuniQC-Atoms   Munich Quantum Valley Neutral-Atom Quantum Computing Demonstrator Prof. Dr. Immanuel Bloch Max Planck Institut für Quantenoptik		PhotonQ   Measurement-Based Photonic Quantum Processor Prof. Dr. Stefanie Barz Universität Stuttgart		MHLASQU   Mode-Coupled Semiconductor Lasers for Coherent Control of Solid-State Quantum Systems Dr. Johannes Koeth nanoplus Nanosystems and Technologies GmbH		HIPEQ   Highly Integrated PIC Based External Cavity Laser Sources for Quantum Technology Applications Dr. Christian Nölleke TOPTICA Photonics AG	
Rymax   Rymax-One Quantum Optimizer Prof. Dr. Herwig Ott TU Kaiserslautern		QPIC-1   Quantum Photonic Integrated Computer Prof. Dr. Kai Müller TU München		Lunch		Lunch	
ATIQ   Trapped-Ion Quantum Computer for Applications Prof. Dr. Christian Ospelkaus Leibniz Universität Hannover		13:10–14:30		13:20–14:20		13:20–14:20	
Spinning   Diamond Spin-Photon-Based Quantum Computer Prof. Dr. Rüdiger Quay Fraunhofer IAF		Quantum Processor Projects 3		Enabling Technologies for Quantum Computing Projects 2		CryoEn2   Cryogenics Solutions and Components for Cryo-Electronics and Quantum Technologies Dr. Andrea Raccanelli Forschungszentrum Jülich	
PhoQuant   Photonic Quantum Computer Dr. Michael Förtsch Q.ant GmbH		GECOS   German Quantum Computer Based on Superconducting Qubits Prof. Dr. Stefan Filipp Walther-Meißner-Institut		CryoEn2   Cryogenics Solutions and Components for Cryo-Electronics and Quantum Technologies Dr. Andrea Raccanelli Forschungszentrum Jülich		qBriqs   Components for Cryogenic Quantum Technology Prof. Dr. Oliver Sander KIT	
		QUASAR   Semiconductor Quantum Processor with Shuttling-Based Scalable Architecture Prof. Dr. Hendrik Bluhm Forschungszentrum Jülich		QCStack   Quantum Computer Stack Dr. Valeria Bartsch Fraunhofer ITWM		Coffee	
		DAQC   Digital-Analog Quantum Computer Dr. Frank Deppe IQM Germany GmbH		15:00–17:00		15:00–17:00	
		De-BRILL   Deutsche Brilliance: New Techniques for the Fabrication and Control of Diamond-Based Quantum Microprocessors Dr. Mark Mattingley-Scott Quantum Brilliance GmbH		Poster session   Quantum Processor and Enabling Technologies for Quantum Computing Projects		Poster session   Quantum Computer Demonstration Setup Projects	
		Coffee					