

WE-Heraeus – Recent Progress in Quantum Computing

<https://www.we-heraeus-stiftung.de/veranstaltungen/recent-progress-in-quantum-computing/>

Date: November, 3rd 2022

Location: Berlin Brandenburgische Akademie der Wissenschaften, Markgrafenstr. 38, 10117 Berlin

Time	Speaker	Affiliation	Title
08:00	REGISTRATION / WELCOME COFFEE		
09:00	Oliver Benson Rainer Blatt Walter Riess	Organizers	Welcome and introduction
	Stefan Jorda	WE-Heraeus-Stiftung, Hanau, Germany	Welcome address
09:15	Jörg Wrachtrup	Universität Stuttgart, Germany	Quantum Technology with spin networks
09:45	Christopher Eichler	Universität Erlangen-Nürnberg, Germany	Towards Error-Corrected Quantum Computing with Superconducting Circuits
10:15	Markus Müller	RWTH Aachen and Forschungszentrum Jülich, Germany	Fault-Tolerant Quantum Computing: From Concepts to Experiments
10:45	COFFEE BREAK		
11:15	Ferdinand Schmidt-Kaler	Universität Mainz, Germany	Trapped ions as a platform for quantum information processing
11:45	Christian Ospelkaus	Universität Hannover, Germany	Towards a fully-integrated trapped-ion QCCD processor
12:15	Martin Ringbauer	University of Innsbruck, Austria	Quantum computing beyond physical qubits
12:45	LUNCH		
14:00	Heike Riel	IBM Research, Zurich, Switzerland	IBM Quantum Computing Roadmap
14:30	Frank Wilhelm-Mauch	Forschungszentrum Jülich and Saarland University, Germany	Superconducting quantum computers: Opportunities and bottlenecks
15:00	Guido Burkard	Universität Konstanz, Germany	Towards high-fidelity quantum computing with spins in semiconductor nanostructures
15:30	COFFEE BREAK		
16:15	Jens Eisert	Freie Universität Berlin, Germany	Can quantum computers learn better than classical computers?
16:45	Christine Silberhorn	Universität Paderborn, Germany	Scaling photonic systems for quantum information processing
17:15	Immanuel Bloch	Max-Planck-Institut für Quantenoptik, Garching, Germany	Quantum Simulations & Quantum Computing with Neutral Atoms
17:45	SHORT BREAK		
18:00	Final Reception & Exhibition Roman Lipski		
19:00	End		

Artworks by Roman Lipski will be on display throughout the workshop.