

Quantum. Network.Perspectives  
Quantum technology collaborations and flagship programmes at a glance

Workshop/ Exchange of experience /

Friday, 3 June 2022-University of Stuttgart, Center for Applied Quantum Technology, ZAQuant, Allmandring 13, 70569 Stuttgart

*Hungarian PIs arrive in Stuttgart on Thursday evening.*

Time	Programme	Actors	Location/ Infrastructure/Comments
10:00 - 10:20	Welcome, presentation about the new building, research focus	Prof. Dr. Jörg Wrachtrup	Seminar room of ZAQuant (01.204) (Room number is not marked, follow the signpost)
10:20 – 10:40	Presentation of the Quantum Information National Laboratory of Hungary	Prof. Dr. Péter Domokos, consortium leader Wigner Research Centre for Physics	
10:40 – 11:00	Spin-Photon interfaces and Quantum memories: a theoretical approach	Prof. Dr. Guido Burkard University of Konstanz, Department of Physics	
11:00 -11:20	Towards realization of Andreev qubits	Dr. Péter Makk Budapest University of Technology and Economics,Department of Physics	
11:20-11:50	C o f f e e B r e a k		
11:50 -12:10	Waveguide dispersion engineering using superconducting qubits	Prof. Dr. Alexey Ustinov Karlsruhe Institute of Technology,Physikalisches Institut	
12:10 -12:30	Piquasso, a comprehensive framework for optical quantum computer programming and simulation	Dr. Péter Rakyta Department of Physics of Complex System; Eötvös Lóránd University	

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12:30-12:50	Room temperature diamond based quantum simulator	Prof. Dr. F. Jelezko Institute for Quantum Optics, Ulm University	
12:50-14:00	L u n c h B r e a k		Restaurant Bruschetta <a href="https://ristorantebruschetta.de/">https://ristorantebruschetta.de/</a> 2 min from the ZAQuant building
14:00-15:00	<b>ZA Quant Building tour</b>	Prof. Dr. Jörg Wrachtrup	
15:00-15:20	Matrix product simulations of open quantum systems and non-Abelian symmetries	Prof. Dr. Zaránd Gergely Budapest University of Technology and Economics, Department of Theoretical Physics	
15:20-15:40	Long-range interacting quantum spin systems	Prof. Dr. Jozsef Fortagh University of Tübingen, Center for Quantum Science	
15:40-16:00	Scalable quantum error mitigation	Dr. Zoltán Zimborás  Wigner Research Center for Physics	
16:00-16:20	Designing versatile spin chains with atoms on surfaces	Prof. Dr. Sebastian Loth  University of Stuttgart Institute for Functional Matter and Quantum Technologies	
16:20-16:40	Theory of Solid State Defect Qubits	Prof. Dr. Adam Gali  Wigner Research Center for Physics	
16:40-16:50	Conclusion and Adjourn	Prof. Dr. Jörg Wrachtrup	Direct airport shuttle organised for the 6:40 PM flight