



# QuantumFrontiers-Days 2024

at the Maritim Airport Hotel Hannover  
Hannover Airport

May 27th and 28th, 2024



Start Day 1	Title	Name
09:00	<b>Welcome coffee</b>	
09:25	Welcome by the Speakers	Speaker-Team
09:55	<i>Guest Speaker: The aluminium oxide photonic integrated platform to enable quantum applications</i>	Sonia Garcia Blanco
10:35	<i>Quantum reasoning tools</i>	Rainer Müller
10:50	<b>Coffee break + picture</b>	
11:30	<i>1st Prize of the ZARM Award for "Fabrication and characterisation of NEG functionalised glass mems for the generation of UHV conditions in miniaturised atom interferometers"</i>	Leonard Diekmann
11:45	<i>New approaches to high precision hybrid integration for ion traps</i>	Florian Meierhofer
12:00	<i>Resonant light-matter coupling to chiral nematic phase of liquid crystals</i>	Silvia Müllner
12:15	<i>Squeezed Light for Gravitational Wave Detectors</i>	Henning Vahlbruch
12:30	<b>Lunch</b>	
13:30	<b>Poster Session "Exploring Light and Matter" + Coffee &amp; Dessert</b>	
16:00	<i>Integrated light for distributed sensing and metrology</i>	Daniel Prades
16:30	<i>Laser technologies for modern nanophotonics</i>	Boris Chichkov
16:45	<i>Dark energy search using atom interferometry in the Einstein-Elevator</i>	Magdalena Misslisch
17:00	<i>Science Outreach at ZARM</i>	Dennis Philipp/Christian Pfeifer
17:15	<i>QuantumVR – Virtual Reality Escape Room Game on Quantum Computing</i>	Tobias Voss
17:30	<b>Pause</b>	
17:45	<i>Community Building Event and Poster Prize Award of Day 1</i>	
18:30	<b>Dinner</b>	

<b>Start Day 2</b>	<b>Title</b>	<b>Name</b>
08:30	<b>Welcome coffee</b>	
09:00	Welcome to Day 2	Speaker-Team
09:10	<i>Guest Speaker: Time-Reversal-Based Quantum Metrology</i>	Vladan Vuletic
09:50	<i>A (nearly) universal quantum logic approach: Far-detuned Raman interaction with titanium and molecular ions</i>	Fabian Wolf
10:05	<i>An avenue for controlling quantum-dominated interactions between ions and molecules</i>	Leon Karpa
10:20	<i>Point defect diffusion in GaInN/GaN quantum well structures</i>	Rodrigo de Vasconcellos Lourenço
10:35	<i>Improving microgravity quality for highly sensitive quantum experiments in the Einstein-Elevator</i>	Christoph Lotz
10:50	<b>Coffee break</b>	
11:30	Theater Session on Structural Discrimination	Shaema Zama, Science Melting Pot
13:00	<b>Lunch</b>	
14:00	<b>Poster Session "At the Quantum Frontier" + Coffee &amp; Dessert</b>	
16:30	<i>Probing new bosons and nuclear effects via precise isotope shifts</i>	Elina Fuchs
16:45	<i>Sensing the Pulse of the Earth with Quantum Technology</i>	Matthias Weigelt
17:00	<i>Prospects for testing the gravitomagnetic clock effect</i>	Eva Hackmann
17:15	<i>Report on the Quantum Frontiers vibration isolation workshop 2023</i>	David Wu
17:30	<b>Close and Poster Prize Award of Day 2</b>	