



Stuttgart, May 6, 2025

Fast Track Innovation Camp

Sustainable Solutions with Quantum Sensors

Preface

Technologies and products in the field of environmental protection and climate positivity remain crucial economic factors for Germany and play a central role in the transformation to a sustainable economy. Quantum and photonic technologies already play an important role and offer immense opportunities for innovative developments. These technologies enable, among other things, more precise measurements, the development of more efficient energy generation systems, and the exploration of new materials that are potentially more environmentally friendly.

In the morning, experts in quantum and sustainability will showcase future markets for quantum and photonic technologies under the motto »Sustainable Solutions with Quantum Sensing«. In the afternoon, participants will receive a crash course on working with quantum sensors. Afterwards, application ideas will be developed and prototyped in working groups. No prior knowledge is necessary. You will get to know various materials, tools, and methods to develop quantum innovation ideas.

As part of the projects

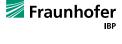


In cooperation with





C PushQuantum





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Program

Tuesday, May 6, 2025



09:30 a.m. Registration

10:00 a.m. Welcome Dr.-Ing. Fabian Edel, Fraunhofer IAO

10:10 a.m. Quantum technologies — a quantum leap for sustainability?

Tobias Prenzel, Fraunhofer IBP Sharon Stauffert, IABP University of Stuttgart

10:30 a.m. Best-Practice

Medical technology and sustainability: Potentials of quantum sensors

Dr. rer. nat. Michael Haupt, Institute for Laser Technologies in Medicine and Metrology at the University of Ulm

10:50 a.m. Responsible Development of Quantum Technology

Emily Haworth, PushQuantum e.V.

11:10 a.m. NVision: Hyperpolarized MRI and NMR made simple

Dr. Anna Parker, NVision Imaging Technologies GmbH

11:30 a.m. QUANDERIab: Experiencing quantum, shaping sustainable innovations

Juliana Ludwig, IAT University of Stuttgart

11:50 a.m. Panel Moderation: Felix Schmidt PushQuantum e.V.

12:15 noon Lunch

13:00 p.m. Makeathon

Impulse: Introduction to quantum sensors Dr.-Ing. Truong Le, Fraunhofer IAO

Ideation: Playful idea generation with quantum wheel and card game Benjamin Burkard, Fraunhofer IAO

Impulse: Low-cost NV quantum sensor in development Jens Wizl, IAT University of Stuttgart

Prototyping: Simple prototypes with electronic components *Dr.-Ing. Truong Le, Fraunhofer IAO*

Pitching: Result presentation Sabina Bähr, IAT University of Stuttgart

17:00 p.m. Feedback

17:30 p.m. End of the workshop

More information about the event



https://www.iao.fraunhofer.de/de/veranstaltungen/2025/ fast-track-innovation-camp.html

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