



Newsletter UpQuantVal – Upper Rhine Quantum Valley

Interreg



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Rhin Supérieur | Oberrhein

UpQuantVal

July 2025 edition

A Word from the UpQuantVal Team

Welcome to the very first edition of UpQuantVal project newsletter! This ambitious cross-border project marks the beginning of a new era for quantum science in the Upper Rhine region. By bringing together German, French, and Swiss expertise, we are laying the foundation for a sustainable and innovative scientific collaboration.

We're excited to have you on board for this dynamic journey. Discover our initial milestones, stay updated on our latest news, and above all, feel free to contribute to this vibrant collective momentum.

Thank you for being part of this journey,

The UpQuantVal team.



Our Key Actions in the Project

To tackle the challenges of quantum technologies, our consortium is active on multiple fronts, from research and development to education, innovation, and outreach working collaboratively to build a strong, dynamic, and sustainable ecosystem.

- We lay solid foundations for sustainable quantum technologies.
- We promote collaboration among researchers, companies, and decision-makers across borders.
- We train the next generation of quantum experts.
- We raise awareness about quantum technologies and foster an engaged community.

Discover our consortium:

<https://www.cesq.eu/upquantval/>

Official Launch of the UpQuantVal Project

On March 3, 2025, the UpQuantVal project was officially launched at the [European](#)

Media coverage

Since the launch of UpQuantVal project, several media outlets have covered our mission and highlighted its potential impact. Articles in media such as [Les Échos](#), [Le](#)

[Center for Quantum Sciences](#) during the Quantum Week. This cross-border initiative brings together academic, research, and private sector stakeholders to create an integrated quantum ecosystem at the heart of the Upper Rhine region.



Supported by the European Union under the [Interreg Upper Rhine program](#) and the European Regional Development Fund (ERDF), UpQuantVal has a total budget of €5.1 million, including €2.3 million in European funding. The project aims to position the region as a leading quantum innovation hub by fostering cross-border cooperation and driving innovation in key sectors such as quantum computing and sensing.

[Learn more about UpQuantVal project](#)

[Journal des Entreprises](#), [Voisins-Nachbarn](#), [Alsace.com](#) and [KL Nachrichten](#) have emphasized the project's importance for the Upper Rhine region. At the same time, our initiative has received extensive coverage

on social media. The German Ambassador to Paris his excellency Mr *Stefan Steinlein* expressed his support on LinkedIn, and many partners have also promoted the project in their channels.

Encouraging Diversity in Quantum Sciences

Even today, it is concerning to see that women remain significantly under-represented in scientific fields, particularly in quantum sciences. This disparity is due to persistent gender stereotypes, a lack of visible female role models, and structural barriers that hinder their career progression.

As part of our collaboration with [*Women in Tech Swidzerland*](#), we are committed to promoting the inclusion of women in quantum sciences. We are exploring initiatives to encourage women to join this innovative field. We believe that diversity of perspectives is essential for advancing quantum research and innovation, and we

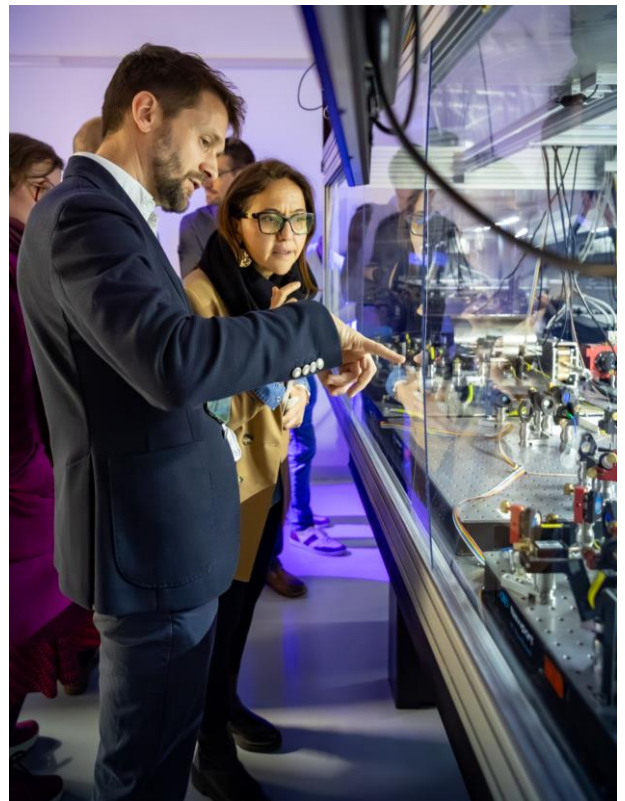
Training program

Quantum technology is no longer a distant concept reserved for fundamental research lab; it is becoming a strategic sector full of innovations and new career opportunities.

You can follow the discussions using the following hashtags:

[*#Interreg*](#) [*#RhinSupérieur*](#) [*#Oberrhein*](#)
[*#CohesionPolicy*](#) [*@UpQuantVal*](#)
[*@InterregRSOR*](#)

are actively working to create opportunities and support women in their scientific journeys.



Quantum -computing, sensor technologies, ultra-secure communications, these are all rapidly growing fields that require highly skilled professionals with expertise in physics, engineering, programming, and modeling.

Gen-Q: The Next Generation in Quantum Sciences

Coordinated by Eucor the European Campus, the Generation Quantum (Gen-Q) program has secured 12 million euros in European funding under the Marie Skłodowska-Curie Actions of Horizon-Europe. Objective: to develop talents capable of addressing the challenges of quantum computing, advanced sensors, and future technologies.



[Learn more and apply](#)

Seeking Talents: Join the Quantum Journey

Opportunities for internships, PhD theses, postdocs, and jobs are currently available within the partner institutions of the UpQuantVal project.

- Doctoral Positions in Quantum Sciences and Technologies
Eucor – The European Campus. [More informations](#)
- Quantum Solutions Engineer. [More informations](#)

First Quantum Hackathon at CESQ

As part of the Quantum Week held on March 6 and 7 at the European Center for Quantum Sciences (CESQ), the center's first quantum hackathon took place. It was initiated by PhD students Clément Gradziel and Laura Pecorari, in collaboration with QPerfect.

For 30 hours, 24 young researchers from nine countries worked intensively on quantum challenges using the MIMIQ emulator developed by the startup QPerfect. Two teams were awarded prizes by a CESQ jury, in the presence of Louise Morel, French Member of Parliament.

QuantumOR: the Quantum Optimization event

The **QuantumOR** working group of EURO (the European Association of Operational Research) is organizing a workshop dedicated to quantum optimization from September 10 to 12, 2025, in Kaiserslautern-Germany.

This event is a must-attend for researchers and professionals in the field. [Learn more](#)

QUANTum3 Event Series: A Journey Through 100 Years of Quantum Physics

As part of its new **QUANTum3** event series, the Technische Universität Kaiserslautern-Landau (RPTU) invites everyone interested to explore the fascinating world of quantum physics. Every second Saturday of the month at 3 p.m. a captivating new lecture on quantum physics is presented at 42kaiserslautern. This series is open to all curious minds, with no prior knowledge required.

QUANTum3 offers a journey through the history of quantum physics, from the revolutionary beginnings in the early 20th century to today's scientific breakthroughs and the promising technologies of tomorrow. Researchers from RPTU explain in an accessible way how quantum effects are already influencing our daily lives in communication, sensor technology, and

medical engineering, and how quantum physics could transform our future.



After each lecture, visitors have the opportunity to engage with the researchers, ask questions, and join the discussion. Admission is free. [Learn more](#)

For any questions, please contact : quantum@physik.rptu.de

Quantum Science Literary Event

As part of UpQuantVal's commitment to making quantum science accessible to a broader audience, the University of Kaiserslautern-Landau organized a public reading of *Quantenlicht* (Quantum Light) by German author Thomas de Padova.

This book, which explores the history of quantum physics, provided an opportunity to foster a dialogue between literature, science, and the general public.

Celebrating the International Year of Quantum Science and Technology

The year 2025 marks the centenary of quantum mechanics, a scientific revolution that has transformed our understanding of the universe. [Learn more](#).

To celebrate this major milestone, the International Year of Quantum Science and Technology (**IQST 2025**) has been proclaimed by the United Nations, with UNESCO serving as the coordinating agency. This global event aims to raise public awareness about the importance of quantum sciences and to promote their development worldwide.



Quantum Sensing Summer School

The Rheinland-Palatinate Technical University Kaiserslautern-Landau (RPTU), in collaboration with the Helmholtz Institute Mainz and Johannes Gutenberg University Mainz, is organizing the **QUIP Quantum Sensing Summer School**, which will take place in Mainz from August 17 to 22, 2025. The event is aimed at Master's students, PhD candidates, and early-career researchers who want to discover how the fundamental principles of quantum physics enable innovative applications today. [Learn more](#)



Please note: The event is already fully booked. Thank you for your interest!

QUIKSTART Winter School on QML

The **QUIKSTART Winter School** on Quantum-Machine-Learning was launched on February 17, 2025, in Kaiserslautern. Organized by Valeria Bartsch (Fraunhofer CML) and Maximilian Kiefer-Emmanouilidis (DFKI & RPTU Kaiserslautern), the event gathered around 100 participants, both onsite and online, for an immersive experience on the challenges of quantum-AI.

Eighteen speakers from academia and industry (TUM, Xanadu, AWS, IQM, etc.) contributed to the program.

Following the success of this first edition, the team is already preparing **QUIKSTART X 2026**, promising a similarly rich program combining training, networking, and high-level scientific exchange.

QUIKSTART is supported by the QUIP initiative, the Interreg UpQuantVal project, and QC-AI, and aims to equip students and young researchers with the skills needed to tackle emerging challenges in quantum AI and QML.

Global Hackathon Series 2025

On the occasion of Swiss Quantum Week 2025, [QAI Ventures](#), in partnership with the Open Quantum Institute and CERN, warmly invites students, researchers, and young entrepreneurs to participate in the Swiss edition of the Global Hackathon Series, which will take place from October 17 to 19, 2025, in Geneva.



Resources to explore the quantum world

To deepen your understanding of quantum science, here is a selection of accessible resources:

- Podcast (FR): [Le Cantique des Quantiques](#) with Julien Bobroff
- Podcast (FR) : [Les podcasts quantiques](#) with Olivier Ezratty
- Podcast (DE): [Quantenradar Podcast](#) par Christoph Grzeschik and Benedict Wenzel
- Podcast (EN) : [Inside Quantum Technology](#)
- Video (FR): [La quantique change-t-elle notre réalité ? | 42 - La réponse à presque tout | ARTE](#)
- Video (DE): [Quantenphysik für Anfänger – drei grundlegende Phänomene kurz erklärt](#)
- Video (DE): [Wie man die Quantenphysik in nur 15 Minuten versteht!](#)
- Video (EN): [The Origin of Quantum Mechanics par Neil Turok](#)

Collaborations and contact

We are always open to new collaborations and happy to answer your questions. If you'd like to learn more or explore specific

opportunities, feel free to contact us:

upquantval-info@unistra.fr

Follow us on LinkedIn [@UpQuantVal](#) for regular updates!

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