

Run of Show



Main
Conference
Room



A Poster
Conference
Room A



B Poster
Conference
Room B



C Poster
Conference
Room C

13:00 – 13:15

CEST



Welcome Address: Connecting the next Generation of Talent with the Pioneers in Quantum

Opening of the conference and introduction of the speakers. Introduction to ThinkingBeyond Education.



Dr. Filip Bar, Founder, CEO and Lead Educator at ThinkingBeyond Education

13:15 – 13:55

CEST



Aqora: Explore Quantum Computing for Real-World Applications

Think Hugging Face meets Kaggle at the frontier of quantum computing: **Aqora** is the open hub where researchers and industry share, discover, and compete on quantum algorithms, models, datasets. Our platform lets enterprises and quantum specialists test quantum solutions on real-world use cases tailored to their needs.



Jannes Stubbemann, MSc, Co-founder and CEO of Aqora Quantum

14:00 – 14:30

CEST

BeyondQuantum Research Project Presentations I

The participants of the BeyondQuantum: Introduction to Quantum and Research Programme present their research projects conducted during the Research Stage of the programme. Sessions will run in parallel. Each session will be 15 min long.



Evaluating QSVM's Scalability: A Comparative Analysis with Classical Support Vector Machines

Nazeefa Labiba & Omar Sobhy



Qubit manipulation in quantum circuits - Solving Grover's algorithm for 2 and 3-qubit systems

Kalash Kothari & Purbadri Ray Chaudhuri



Hybrid secure messaging using Quantum Key Distribution and post-quantum cryptography

Disha Patel



Sparse signal processing using QAOA

Wasif Ahmed & Mohamedelfatih Seedahmed



Quantum image edge detection

Aayush Jalgoankar & Pratham Maliya



Does Decoherence as a mechanism solve the preferred basis problem in the Many Worlds interpretation?

Jacob Winchester

14:35 – 15:05

CEST



Ingenii: On a Mission to Revolutionize Life Sciences with Quantum ML

Introducing our second sponsor: **Ingenii**, a trailblazer in quantum machine learning for life sciences. Ingenii is closing the quantum talent gap by making quantum development more accessible than ever in a visual and interactive way. Their mission is to empower machine learning scientists with the resources they need to leverage quantum for their research, accelerating innovation by simplifying algorithm development within a collaborative, open-source ecosystem.



Dr. Laia Domingo, Co-founder and CSO at Ingenii

15:10 – 15:40

CEST

Meet and Greet I

Time for networking, visiting the booths of companies and talking to the research students about their projects.

15:45 – 16:15

CEST

BeyondQuantum Research Project Presentations II

The participants of the BeyondQuantum: Introduction to Quantum and Research Programme present their research projects conducted during the Research Stage of the programme. Sessions will run in parallel. Each session will be 15 min long.



Solving the Traveling Salesman Problem using a Variational Quantum Eigensolver

Akshay Kushwaha & Osewuike Igwe & Nabin Pandey



Entanglement scaling in Grover's algorithm: Implications for MPS simulations

Kishan Bhowal & Lucas Rhode



Utilising quantum entanglement for fluid dynamic simulations

Vamsi Krishna Charugundla & Nivaan Kaushal



Quantum Boltzmann Machines for credit portfolio modelling

Harvey Gregg



Can the Stochastic Schroedinger Equation be used to measure continuous weak measurements?

Jashn Agarwal & Jamie Walton



Solving the Traveling Salesman Problem using QAOA

Mariam Khaled & Ehan Sajjad

16:20 – 16:50

CEST



QWorld: Building a Global Quantum Community

QWorld is a global nonprofit network focused on promoting quantum technologies and quantum computing education. It connects researchers, educators, students, and enthusiasts through workshops, talks, and collaborative projects. By offering hands-on learning and open-access resources, QWorld aims to make quantum science more accessible and build a diverse, international quantum community.



Dr. Pawel Gora, Board Chairman of QWorld, Founder and CEO of the Quantum AI Foundation

16:55 – 17:25

CEST

Meet and Greet II

Time for networking, visiting the booths of companies and talking to the research students about their projects.

17:30 – 18:00

CEST



Panel: The Present and Future of Quantum

This panel explores the current state of quantum research and technology, recent breakthroughs, and the key challenges that need to be solved to advance the field. Panelists will share insights from their own work, reflect on the challenges and opportunities shaping the field, and offer advice for students and aspiring quantum scientists.



Prof. Dr. Gerhard Hellstern, Physicist and Professor for Business Economics and Banking at the DHBW Stuttgart, Germany



Dr. Laia Domingo, Co-founder and CSO at Ingenii,



Jannes Stubbemann, MSc, Co-founder and CEO of Aqora Quantum



ThinkingBeyond
Education



aqora



ingenii



INTERNATIONAL YEAR OF
Quantum Science
and Technology

18:05 – 18:35

CEST BeyondQuantum Research Project Presentations III

The participants of the BeyondQuantum: Introduction to Quantum and Research Programme present their research projects conducted during the Research Stage of the programme. Sessions will run in parallel. Each session will be 15 min long.

18:05
18:20

- A** *Exoplanet detection via Kepler data: A comparative study of quantum and classical Machine Learning models*
Samairra Malhotra

- B** *Quantum methods for modular exponentiation in Shor's algorithm*
Ayomide Olumide-Attah & Roman Bagdasarian & Francis Ikenye

18:20
18:35

- A** *Noise effects on measurement-device-independent Quantum Key Distribution*
Taskia Islam & Irene Gallini

- B** *VQE - The effect of varying Ansatzes on the Variational Linear Quantum Solver algorithm*
Rory Sorola & Jason Yao

18:40 – 19:10

CEST Talk: Let's Build the Future of Quantum Finance Together

Quantum computing is not ready yet. And it seems we'll have to wait a few more years before the technology reaches practical applications. Knowing this, it is imperative for us — teachers and advocates of quantum computing — to promote it to the next generation of experts, whether in hardware development or real-world use cases. The goal of my talk is to encourage young students to take action today, so that in a few years, they'll be the ones leading the charge with new and ingenious ideas.



Dr. Oswaldo Zapata, Expert in Quantum Computing in Finance

19:10 – 19:40

CEST Talk: Secrets to Working in Quantum

How do we orient and inspire people interested in driving the development of quantum information science? By focusing broadly on how this technology will evolve and the range of skills needed to support it. From a learner's perspective, this represents a range of career opportunities that is growing and changing. Christopher Bishop has developed a workshop to provide perspective on how the quantum workforce is evolving and guidance on the myriad options for people interested in contributing.



Christopher Bishop, Workplace Futurist, TEDx Speaker and former IBM

19:40 – 19:45

CEST Closing & Goodbye

Closing of the conference and reflection of the event. Next steps for attendees.



Dr. Filip Bar, Founder, CEO and Lead Educator at ThinkingBeyond Education

19:45 – 20:00

CEST Meet and Greet III

Time for a final round of networking, visiting the booths of companies and talking to the research students about their projects. Thanks for attending and we hope you have had a great time!

Meet our Speakers



Christopher Bishop

**Technology Futurist, TEDx Speaker,
Former IBMer**

Christopher Bishop is a technology futurist, TEDx speaker and former IBMer. He has emceed and moderated panels at numerous quantum technology conferences including The Economist's "Commercialising quantum" events in London and Silicon Valley, as well as Quantum.Tech events in London, Singapore, Paris, and Washington, D.C. He was also the Chairperson for the Quantum Innovation Summit held in Dubai earlier this year. Chris has hosted the Quantum Tech Pod series for the past three years, interviewing over 75 C-suite executives at leading quantum companies. He recently started a new podcast series, Qubit Confidential, for Alpha Events. Chris is also a member of the Quantum Economic Development Consortium (QED- C) and contributes to the Workforce Technology Advisory Committee. Once a month, he hosts Office Hours, a Zoom meeting connecting students studying quantum subjects with mentors working in the private sector or at national labs.

Featured:

19:10 – 19:40
CEST

Talk: Secrets to Working in Quantum



Prof. Dr. Gerhard Hellstern

**Physicist and Professor for Business Economics and
Banking at the DHBW Stuttgart, Germany**

Professor and Doctor affiliated with DHBW Stuttgart. He is interested in quantum optimisation and quantum machine learning. Specially in the applications in risk measurement and management and the power of rising digital currencies.

Featured:

17:30 – 18:00
CEST

Panel: The Present and Future of Quantum (Panelist)



Dr. Pawel Gora

**Board Chairman of QWorld, Founder and
CEO of the Quantum AI Foundation**

Dr. Paweł Gora is a scientist, entrepreneur, advisor, and philanthropist. He is the founder and CEO of Fundacja Quantum AI (<https://www.qaif.org>), a nonprofit organization that supports education and research in new technologies, especially AI and quantum computing. He is also the chairperson of the board of QWorld (<https://qworld.net>), an international nonprofit organization that supports education in quantum technologies. Dr. Gora is a researcher working in the fields of AI, quantum computing, intelligent transportation systems, and complex processes. He received his Ph.D. in Computer Science from the University of Warsaw and is currently a part-time postdoc at Jagiellonian University in the ERC project "COeXISTENCE." He is the founder and coordinator of TensorCell (<https://tensorcell.com>), an independent research group that develops AI algorithms to optimize complex processes such as urban road traffic and cancer treatment. He is an advisor for several startups. He has interned at Microsoft, Google, CERN, and IBM Research. More information: <https://www.mimuw.edu.pl/~pawelg>.

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16:20 – 16:50
CEST

QWorld: Building a Global Quantum Community



Dr. Oswaldo Zapata

Theoretical Physicist and Expert in Quantum Finance

Dr. Oswaldo Zapata is a quantum computing expert specializing in finance. He holds a master's degree in subnuclear physics and a PhD in theoretical physics. With over 25 years of experience, he focuses on making complex mathematical and physical concepts accessible to non-experts. His current work centers on helping finance professionals understand the impact of quantum computing and on supporting the formation of technical teams. He is a prolific writer. Some of his eBooks can be found on his LinkedIn page.

<https://www.linkedin.com/in/oswaldo-zapata-phd-quantum-finance/>

Featured:

18:40 – 19:10
CEST

Talk: Let's Build the Future of Quantum Finance Together



Dr. Filip Bar

Founder, CEO and Lead Educator at ThinkingBeyond Education

Dr. Filip Bár is an educator, research mathematician and the founder, CEO and Lead Educator of ThinkingBeyond Education — an organisation dedicated to educating the future experts in STEM. He studied mathematics and physics in Tübingen, Munich, and the University of Cambridge, from which he obtained his PhD. His research is in the field of Synthetic Differential Geometry with a focus on the theory and applications of infinitesimal algebra.

Filip has more than eight years of teaching experience across secondary and higher education holding a Qualified Teacher Status and a Postgraduate Certificate of Education. After teaching at a leading independent school in the UK he worked as a Research Mathematician at the Centre of Mathematical Sciences at Lund University in Sweden. Besides building ThinkingBeyond and teaching its programmes he also serves as an external expert advisor at Google DeepMind.

Featured:

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Welcome Address: Connecting the next Generation of Talent with the Pioneers in Quantum

17:30 – 18:00
CEST

Panel: The Present and Future of Quantum (Moderator)

19:40 – 19:45
CEST

Closing and Goodbye!



Dr. Laia Domingo

Co-founder and CSO at Ingenii

Dr. Laia Domingo is Chief Science Officer at Ingenii and a researcher in quantum machine learning, with a PhD from the Polytechnic University of Madrid. She develops practical quantum solutions for life sciences, focusing on applications in drug discovery and biomedical research. Her work spans quantum reservoir computing, hybrid neural networks, and machine learning for quantum systems, with over 15 publications in the field. She also teaches postgraduate courses at the Universitat Politècnica de Catalunya, aiming to make quantum technologies accessible and impactful.

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Ingenii: On a Mission to Revolutionize Life Sciences with Quantum ML

17:30 – 18:00
CEST

Panel: The Present and Future of Quantum (Panelist)



Jannes Stubbemann

MSc, Co-founder and CEO of Aqora Quantum

Jannes Stubbemann is the co-founder and CEO of Aqora Quantum, a platform that opens up quantum research through public challenges, shared datasets and an algorithm hub. He holds an M.Sc. in Computer Science with Distinction from the University of Paderborn, Germany, where his thesis simulated Google's quantum-supremacy experiment.

Jannes previously secured Bitcoin infrastructure at Binance, built the engineering team at Cargoboard, co-founded the mobile data-labelling start-up Swarms, and led PushQuantum, a leading Munich based quantum student initiative.

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Aqora: Explore Quantum Computing for Real-World Applications

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Who are we?



ThinkingBeyond Education

We train the Subject Experts of Tomorrow.

ThinkingBeyond Education is an innovative educational organisation providing a global learning platform for students who want to go deep in mathematics, theoretical physics, and computer science. Our high-quality educational programmes are designed to train the next generation of researchers—curious minds who want to explore foundational ideas from the ground up and tackle the challenges of 21st-century science.

We go beyond textbook learning. Our courses—like BeyondAI, BeyondQuantum, BeyondResearch, and Physics from a Researcher's POV—offer a skill-based, researcher's point of view approach that gives students the tools to think independently, ask bold questions, and solve real problems. Whether you're aiming for a future in academia or industry, we'll help you get there with rigor, clarity, and creativity.

ThinkingBeyond is powered by an international team of passionate educators and researchers who share a commitment to reshaping how advanced subjects are taught. As a forward-thinking educational organisation, we design rigorous, modern programmes that equip students with the skills and mindset needed to thrive and make an impact in today's fast-evolving scientific landscape.

At the core of our teaching is a cutting-edge educational framework—holistic, effective, and developed by our founders through years of research and real-world testing. This approach ensures students don't just learn—they build deep understanding, critical thinking, and the confidence to explore and innovate.

Explore more at <https://thinkingbeyond.education>
Follow us on [LinkedIn](#) and [Instagram](#)

Event Sponsors



Aqora Quantum

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Ingenii

Trailblazer in quantum machine learning for life sciences. Ingenii is closing the quantum talent gap by making quantum development more accessible than ever in a visual and interactive way.

Their mission is to empower machine learning scientists with the resources they need to leverage quantum for their research, accelerating innovation by simplifying algorithm development within a collaborative, open-source ecosystem.

