

# NORTHERN PROSPECTS OF QUANTUM

## EVENT PROGRAMME

**30 March 2023 at 09:00 – 17:30, followed by an Evening Reception until 21:00**

Venue: *Hotel Stanhope, Rue Du commerce 9, 1000 Brussels*

Evening Reception: *Corniche Verte 3, 1150 Woluwe-St. Pierre (bus transport)*

Event Moderator: *Charlotte Van Velthoven (Geerdink), Charly Speaks*

### 9:00 – 9:45 Opening of the Event

- Welcome & opening on behalf of the hosts, the Nordic and Baltic EU R&I Liaison offices: *Paula Eerola, President of the Academy of Finland, and Nina Kopola, Director General of Business Finland*
- Keynote: EC Perspectives and Introduction to EU Investments in Quantum Technology, *Acting Director Gustav Kalbe, DG Connect C Digital Excellence and Science Infrastructure, the European Commission*

### 9:45 – 10:30 Societal Aspects of Quantum Technologies

This session will discuss the societal aspects of quantum technologies from viewpoints that are topical for policymakers to consider.

- Opportunities for quantum research in EU Defence Innovation Scheme, *Policy Officer Kristine Rudzite-Stejskala, European Commission, Directorate-General for Defence Industry and Space*
- Strategic Collaborations for Quantum Technology Workforce and Ecosystem Development, *Prof. Jacob Sherson, Aarhus University*
- Quantum Technology and Cybersecurity, *Prof. Sabrina Maniscalco, Helsinki University (InstituteQ), and CEO & Co-Founder, Algorithmiq Ltd*

### 10:30 – 10:50 Coffee Break

### 10:50 – 11:50 Recent Evolutions in the Nordic and Baltic Quantum Agendas, and Emerging Collaboration Platforms

This session will highlight the key Nordic and Baltic ecosystem and EU infrastructure collaborations, as well as some key messages emerging to the European level from the Nordic and Baltic countries. The session is intended to provide context and inspiration for all participants.

- Nordic Quantum, *Prof. Pertti Hakonen, Aalto University / InstituteQ*
- Nordic Quantum Life Science, *Portfolio Manager Ebba Carbonnier, SWELife, and Karolinska Institutet*

- Nordic-Estonian Quantum Computing e-Infrastructure Quest, *Dr Veiko Palge, University of Tartu*
- European Quantum Software Institute and the Opportunities for Collaboration in Quantum Software, *Prof. Andris Ambainis, University of Latvia*
- Lithuanian International Quantum Cooperation and Incentives for Cooperation, *Prof. Gediminas Juzeliūnas, Vilnius University*

#### **11:50-12:40 Key messages emerging to the European level from the national Nordic and Baltic quantum agendas**

The session comprises a panel discussion with representatives from the Baltic and Nordic countries.

##### Panel members:

- *Dirk Oliver Theis, Prof., University of Tartu*
- *Sabrina Maniscalco, Prof., Helsinki University (InstituteQ), CEO & Co-Founder, Algorithmiq Ltd*
- *Gunta Kunakova, Dr, University of Latvia*
- *Francesco Massel, Prof., University of South-Eastern Norway*
- *Per Delsing, Prof., WACQT and Chalmers Technical University*
- *Tadas Paulauskas, Dr, Center for Physical Sciences and Technology*
- *Peter Krostrup Jeppesen, Prof., Niels Bohr Institute*

#### **12:40– 13:40 Lunch at Stanhope**

#### **13:40– 15:10 Global forerunners and European key players – where is the Quantum business going?**

This session will highlight the for-profit companies that are shaping the development of the whole quantum field in Europe and globally. What kind of “bottlenecks” do they see, and how the support from national and European policies could multiply/increase the impact? The session will be preceded by a brief introduction by *Nicklas Bergman*, Private VC Investor, and EIC Fund Investment Committee member, who also moderates the panel.)

- *The Story of IQM, Dr Juha Vartiainen, COO and Co-founder, IQM Ltd*
- *EIC Quantum Activities, Dr Samira Nik, EIC Programme Manager for Quantum Tech and Electronics*
- Panel discussion with a group of for-profit company representatives:
  - *Deep Light Vision / CEO Johannes Swartling (SE)*
  - *QuontrolOx / CEO and CO-Founder Vishal Chatrath (FI)*
  - *Equinor / Senior Engineer Technology Management Tobi Giesgen (NO)*
  - *QuCertify / Prof. Mohamed Bourennane (SE)*
  - *SemiQon Technologies / CEO Himadri Majumdar (FI)*
  - *GScan / Chief Strategy Officer and Co-founder Andi Hector (EE)*
  - *Accenture Baltics / Applied Quantum Computing R&D Project lead Zane Kalnina (LV)*

#### **15:10-15:40 Coffee break**

### **15:40-16:40 Ingredients of a thriving quantum ecosystem: the vital building blocks**

This session will discuss the elements of a long-term successful ecosystem. It creates understanding of the various key aspects and why they need to be developed in parallel.

- Solid Foundation in Frontier Research, *Prof. Göran Johansson, WACQT and Chalmers University of Technology*
- Facilitating European Quantum Ecosystems, *Dr Antti Vasara, President & CEO, VTT Ltd, President of EARTO, the European Association of Research and Technology Organisations*
- HPC & Quantum: You Can't Have One Without the Other, *Dr Tiina Kupila-Rantala, Vice Managing Director, CSC - IT Center for Science*
- Making Norway "Quantum Ready", *Dr Morten Dalsmo, Executive Vice President at SINTEF and Head of SINTEF Digital*

### **16:40 – 17:20 High level panel discussion on policy implications**

This session will open perspectives to the policy implications of quantum technologies, with focus on how the national quantum agendas and the European agenda should benefit from each other. The discussion is moderated by Professor Heiner Linke, Center for Nanoscience at Lund University.

Suggested panel members (TBC) include e.g. EC representative(s) and high-level national representatives

- Gustav Kalbe, *Acting Director Gustav Kalbe, DG Connect C Digital Excellence and Science Infrastructure, the European Commission*
- Darja Isaksson, *Director General, Vinnova*
- Erja Heikkinen, *Director, Ministry of Education and Culture of Finland*
- Mari Sundli Tveit, *Chief Executive Officer, Research Council of Norway*
- Aigar Vaigu, *Chief Executive Officer, Metrosert AS*

### **17:20 – 17:30 Closing Words**

### **18.20 Bus transportation from Hotel Stanhope to Corniche Verte, 1150 Woluwe-St. Pierre**

### **19:00 – 21:00 Evening reception at the Residence of the Permanent Representative of Finland to the European Union**

Hosts/Speakers: Permanent Representative, Ambassador Markku Keinänen, and Deputy Permanent Representative, Ambassador Tuuli-Maaria Aalto.

### **21.00 Bus transportation back to Hotel Stanhope**