

## **Program and Speakers**

This information is up to date as of September 28, 2024. Session times are subject to slight changes.

## Day 1 - Wednesday, October 2

8:00 to 8:45 a.m. Check In, breakfast and networking

8:45 a.m. Call to order

8:50 a.m. Welcoming remarks

Megan Lee, Managing Director, Quantum City

9:00 to 9:40 a.m. ELI5 ("Explain Like I'm Five"): Quantum Science to Applications

Martin Laforest, Managing Partner, Quantacet

9:40 to 9:45 a.m. **Quantum Solutions Showcase Presentation** 

Kris Tziritas, Financial Engineer, Multiverse Computing

9:50 to 10:25 a.m. BREAK - Networking and refreshments

10:30 to 11:15 a.m. The Role of Quantum Solutions in Creating Sustainable Communities

In 2022, the global population reached 8 billion, with over half residing in urban areas. Approximately 1.1 billion people live in slums or slum-like conditions within cities. By 2050, it is projected that 70% of the population will be urban dwellers. Many cities are already struggling to meet the demands for housing, infrastructure and services, potentially exacerbating societal challenges in the coming decades. How can quantum technology help develop sustainable cities?

Nannette Ho-Covernton, Sustainability Leader, P.Eng.; Spartan Controls

(Moderator)

Catherine Lefebvre, Senior Advisor Open Quantum Institute, GESDA

Marc Lijour, Head of Innovation and Business Development | Financial Services

Industry, EXAION

Murray Thom, Vice President Quantum Technology Evangelism, D-Wave

11:20 a.m. to 11:25 a.m.

**Quantum Solutions Showcase Presentation** 

Kanav Setia, CEO, qBraid

11:30 to 12:15 p.m.

The Role of Quantum Solutions in Modern Energy for All

While the world progresses toward sustainable energy goals, the pace remains insufficient. Achieving net zero by 2050 requires deep, rapid and sustained GHG emission reductions of 43% by 2030. It also requires significant changes to policies and elimination of barriers (for example, batteries account for nearly 40% of the total production cost of battery electric vehicles). How can quantum solutions accelerate this progress?

lan Gates, Associate Vice-President (Research and Innovation); Professor, Chemical and Petroleum Engineering, University of Calgary (Moderator) Rafal Janik, COO, Xanadu

**Rhonda Jewett,** VP, Growth and Operations, Arcus Power Corp. **Bob Parney**, IBM Global Lead for Quantum in Energy and Sustainability

12:15 to 1:15 p.m.

BREAK - Lunch and networking

1:25 to 2:10 p.m.

The Role of Quantum Solutions in Human Health

Sequencing the human genome is expected to produce 2-40 exabytes of data in the next decade, necessitating advancements in data mining technology. Quantum computing offers potential near-term benefits in human health applications by more efficiently representing biological data than on classical computers. Could this help minimize suffering from preventable diseases and improve access to safe, effective and affordable medicines and vaccines? What could quantum technology do to help with medical imaging? Or targeted drug design?

**Elica Kyoseva**, Director of Quantum Algorithm Engineering, NVIDIA (Moderator) **Morten Bache**, Scientific Director of Quantum and AI, Novo Nordisk Foundation **Wade Davis**, VP of Computational Science and Head of Digital Research, Moderna

**Matthew Rosen**, Director, Low Field MRI and Hyperpolarized Media Laboratory, Co-Director, Center for Machine Learning, and Associate Professor of Radiology, Mass General/Martinos Center for Biomedical Imaging and Harvard Medical School

2:10 to 2:15 p.m.

Quantum Solutions Showcase Presentation
Michael Lachner, Co-founder and CEO, Agarios

2:15 to 3:00 p.m.

#### **Incubators and Accelerators for Quantum Innovators**

A significant portion of the world's quantum startups have been created in the last five years. Who are the quantum accelerators around the world? And how do they empower startups by providing essential resources and support? What are some learnings? What challenges do they face?

**David Yiptong**, Manager, QAI Accelerator (powered by Quantum City) (Moderator)

**Ezunial (Eze) Burts III**, Director, Duality Quantum Startup Accelerator at the University of Chicago Booth School of Business

Sarah Jenna, Managing Director of QV Studio

Thomas Landis, COO, QAI Ventures

Jake Malliaros, Quantum Stream Lead, Creative Destructive Lab

3:00 to 3:10 p.m.

#### **Quantum City Announcement**

Megan Lee, Managing Director, Quantum City

3:10 to 3:40 p.m.

#### **BREAK- Networking and refreshments**

3:45 to 3:50 p.m.

### **Quantum Solutions Showcase Presentation**

Vlad Gheorghiu, CEO and President, softwareQ

3:55 to 4:40 p.m.

# How Do We Set up the Right Conditions for Success in the Quantum Ecosystem?

This panel will explore how to create a healthy quantum ecosystem by addressing questions such as:

- How do we engage with international ecosystems?
- How can we become leaders in commercialization?
- How can enterprises innovate and guide quantum solution development when startups are the primary creators?
- Is investing in quantum technologies a dream or a nightmare?

Martin Laforest, Managing Partner, Quantacet (Moderator)
Alexandra Beckstein, CEO, QAI Ventures
Elica Kyoseva, Director of Quantum Algorithm Engineering, NVIDIA

Kate Waimey Timmerman, CEO, Chicago Quantum Exchange

4:40 to 4:50 p.m.

Special remarks on the Quantum Ecosystem in Alberta
Joanne Cuthbertson, Co-Founder, Quantum Horizons Alberta

4:50 to 4:55 p.m. Closing Remarks

Megan Lee, Managing Director, Quantum City

## Day 2 - Thursday, October 3

9:00 to 9:30 a.m. Breakfast and Networking

9:40 a.m. Call to order and Welcoming Remarks

Megan Lee, Managing Director, Quantum City

9:45 a.m. Introduction of Government Official

9:50 to 10:00 a.m. Opening Remarks by Government official

10:05 to 10:10 a.m. **Quantum Solutions Showcase Presentation** 

Rohit Patel, AVP & Lead – Data Science & Quantum Computing, Mphasis

10:10 to 10:55 a.m. How are Global Enterprises Getting Ready to be Quantum Safe?

There is a lot of conflicting information and opinions about the urgency of becoming quantum-ready and what that entails. Our panel will offer insights by addressing questions such as:

- Are global enterprises prepared for the impact of quantum technology?
- What roles do governments play in this journey?
- How are enterprises balancing the risks and benefits of quantum innovation, including quantum computing, Quantum Key Distribution (QKD), quantum-secure networks, and post-quantum cryptography?
- What pragmatic projects can enterprises undertake?
- How do enterprises balance long-term wins (quantum hardware) with quick wins (short-term applications)?

**Ken Barker**, Scientific Director – National Cybersecurity Consortium; Professor – University of Calgary (Moderator)

Mark Adcock, Systems Architect Consultant

Martin Charbonneau, Head Quantum-Safe Networks, Network Infrastructure

Business Group, Nokia

Lily Chen, Mathematician, NIST Fellow

Alexander Rau, Partner, Canada's Technology Risk Consulting (TRC) Advisory

Practice, KPMG

10:55 to 11:00 a.m. **Quantum Solutions Showcase Presentation** 

Jordan Smith, Co-founder and CEO, QTi

11:05 to 11:50 a.m.

#### **Inclusive Pathways Forward to Quantum in Society**

Genetically Modified Organisms (GMOs) and Artificial Intelligence (AI) are just two examples showing that we often fail to consider the consequences of new technologies until they are already in use. Have we learned from these experiences? What are the pros and cons of quantum technologies? Can we establish a framework that research communities and industries can adopt? How can we ensure that the development and adoption of quantum technologies are inclusive and benefit all of society, not just select groups?

Catherine Lefebvre, Senior Advisor Open Quantum Institute, GESDA

(Moderator)

Tina Dekker, Associate, BLG

Greg Hart, Co-founder and Chief Design Officer, Inception U

Ryan Mandelbaum, Editor in Chief, IBM Quantum

11:55 am to 12:25 p.m.

Break - Networking and refreshments

12:30 to 12:35 p.m.

**Quantum Solutions Showcase Presentation** 

Carlos Kuchkovsky, Co-founder and CEO, QCentroid

12:40 to 1:20 p.m.

Fireside Chat with Christophe Jurczak, Managing Partner, Quantonation

Quantonation was the first VC Fund dedicated to quantum technologies. Don't miss this opportunity to learn why Christophe Jurczak chose to create a fund dedicated to the nascent quantum technology ecosystem, and the observations made and lessons learned along the way. What are the challenges of investing in quantum? How does Quantonation overcome these challenges? How does the company foster ecosystems around emerging technologies, and how can we best encourage adoption of those technologies?

**Barry Sanders**, Professor and Scientific Director, Quantum City **Christophe Jurczak**, Managing Partner, Quantonation

1:20 to 1:25 p.m.

**Closing Remarks** 

Megan Lee, Managing Director, Quantum City

1:25 p.m.

Lunch – to go