

Session Program

1-4 Nov 2022



International Conference on Quantum Technologies for High-Energy Physics (QT4HEP22)

Industry & Entrepreneurship

CERN, 500/1-001 - Main Auditorium

Thursday 3 November

09:00

Industry & Entrepreneurship

Session | **Location:** CERN, 500/1-001 - Main Auditorium | **Convener:** Amanda Diez Fernandez, Benjamin Frisch

09:00–09:05 **Welcome**

09:05–09:35 **The Quantum Landscape - Keynote**

Speaker

Grégoire Ribordy

09:35–09:55

The ATIQ project: collaborative development of trapped-ion quantum computers

Speaker

Celeste Torkzaban

09:55–10:15

Developing instrumentation for Quantum Computers

Speaker

Moritz Kirste

10:15–10:35

Ion traps and the road to fault tolerant quantum computing

Speaker

Cornelius Hempel

10:35–11:00

Coffee break

11:00–11:20

Trapped ions quantum computing - challenges and perspectives

Speaker

Anna Kaminska

11:20–11:40

Analog quantum computing: from the lab to the industry

Speaker

Marta Estarellas

11:40–12:00

What's so special about diamonds?

Speaker

Mark Mattingley-Scott

12:00–12:20

PASQAL neutral atom arrays processors and their applications

Speaker

Louis Vignoli

12:20–12:40

The potential of quantum computing for drug development

Speaker

Marielle van de Pol

12:40–13:00

A quantum-inspired tool for bridging the NISQ ERA

Speaker
Simone Montangero

13:00-14:00 **Lunch**

14:00-14:20 **Measuring brain function using quantum sensors - ONLINE TALK**

Speaker
Matthew Brookes

14:20-14:40

Intel Quantum SDK: A Platform for Efficient Execution of Variational Algorithms

Speaker
Gian Giacomo Guerreschi

14:40-15:00 **Quantum vs classical: assessing quantum advantage**

Speaker
Thomas Ayrat

15:00