

## **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