

## **Session Program**

**4-8 Sept 2023**



## **Joint Annual Meeting of the Swiss and Austrian Physical Society 2023**

### ***Quantum Computing***

# Thursday 7 September

14:00

## Quantum Computing: I

Session | Location: Room 116

14:00-14:15

### 【801】 Introduction

#### Speaker

Dominik Zumbühl

14:15-14:45

### 【802】 Scaling-up demonstrations on superconducting qubits

#### Speaker

Daniel Egger

14:45-15:00

### 【803】 Efficient quantification of non-classicality using indefinite causal orders

#### Speaker

Kyrylo Simonov

15:00-15:15

### 【804】 Exponential concentration and untrainability in quantum kernel methods

#### Speaker

Samson Wang

15:15-15:30

### 【805】 Coherent manipulation of a Ge/Si core-shell nanowire based gatemon qubit

#### Speaker

Han Zheng

15:30-16:00

### 【806】 Hybrid Variational Classical-Quantum Computing: Ingredients to make it work

#### Speaker

Zoë Holmes

16:00-16:15

### 【807】 Quantum computing with hole spin qubits in silicon and germanium quantum dots.

#### Speaker

Stefano Bosco

16:15-16:30

### 【808】 Tailored error correction codes for spin qubits: towards fault-tolerant quantum computing with semiconductor quantum dots

#### Speaker

Bence Hetényi

16:30

17:00

**Quantum Computing: II****Session** | **Location:** Room 116

17:00-17:30

**【811】 Quantum computation and simulation - the semiconductor way****Speaker**

Lieven Vandersypen

17:30-17:45

**【812】 The power and limitations of learning quantum dynamics incoherently****Speaker**

Manuel Rudolph

17:45-18:00

**【813】 Growth and characterization of Ge/Si<sub>1-x</sub>Gex planar heterostructures for spin qubits applications****Speaker**

Arianna Nigro

18:00-18:30

**【814】 Germanium as a platform for semi- and superconducting qubits.****Speaker**

Andrea Hofmann

18:30-19:00

**【824】 Towards long-distance quantum networks using trapped ions in optical cavities****Speaker**

Ben Lanyon

19:00

## Friday 8 September

12:00

### Quantum Computing: III

**Session** | **Location:** Room 116

12:00-12:30

**【821】 Low field spin qubits in planar Ge****Speaker**

Georgios Katsaros

12:30-12:45

**【822】 Hole Spin Qubits in Silicon Fin Field-Effect Transistors****Speaker**

Rafael Eggli

12:45-13:00

**【815】 Capacitive crosstalk in gate-based dispersive sensing of spin qubits****Speaker**

Alexei Orekhov

13:00-13:15

**【825】 Circuit QED with a singlet-triplet qubit****Speaker**

Jann Hinnerk Ungerer

13:15-13:30

**【826】 Strain Analysis in Ge Quantum Well by GPA and Raman techniques****Speaker**

Alicia Ruiz

14:00