

**Session Program**

**26 June 2022 to 1 July 2022**

**Early Career Conference in Trapped Ions  
(ECCTI) 2022**

***Quantum Information & Computing***

CERN, 503/1-001 - Council Chamber

# Monday 27 June

11:00

12:10

## Quantum Information & Computing

Session | Location: CERN, 500/1-001 - Main Auditorium | Convener: Celeste Torkzaban

11:00-11:22

### Qubit addressing in a standing wave light field from integrated photonics

Speaker

Carmelo Mordini

11:23-11:45

### Towards standing-wave quadrupole Mølmer-Sørensen gates

Speaker

Oana Bazavan

11:45-12:07

### Standing-Wave Mølmer-Sørensen Gate in the Adiabatic and Non-Adiabatic Regime

Speaker

Sebastian Saner

## Wednesday 29 June

11:00

### Quantum Information & Computing

**Session** | **Location:** CERN, 500/1-001 - Main Auditorium | **Convener:** Carmelo Mordini

11:00-11:22

#### Operation of a microfabricated 2D trap array

**Speaker**

Marco Valentini

11:23-11:45

#### Microfabricated 3D Ion Traps and Integrated Optics

**Speaker**

Jakob Wahl

11:45-12:07

#### Signal Generation for Trapped Ion Quantum Gates

**Speaker**

Norman Krackow

12:10

# Thursday 30 June

11:00

## Quantum Information & Computing

**Session** | **Location:** CERN, 500/1-001 - Main Auditorium | **Convener:** Zachary Smith

11:00-11:22

### Collaborative design of a trapped-ion quantum computer with fully interconnected qubits

#### Speaker

Celeste Torkzaban

11:23-11:45

### A two-node trapped-ion quantum network with photonics interconnects

#### Speaker

Gabriel Araneda

11:45-12:07

### Device-Independent Quantum Key Distribution Between Two Ion Trap Nodes

#### Speaker

David P. Nadlinger

12:10

14:10

## Quantum Information & Computing

**Session** | **Location:** CERN, 500/1-001 - Main Auditorium | **Convener:** Gabriel Araneda

14:10-14:32

### ABaQuS: A trapped-ion quantum computing system using $^{133}\mathrm{Ba}^{+}$ qubits

#### Speaker

Ana Sotirova

14:33-14:55

### Trapped Barium Ions at the United States Air Force Research Laboratory

#### Speaker

Dr Zachary Smith

14:55