

## Session Program

18-23 Jun 2023



Canadian Association  
of Physicists

Association canadienne  
des physiciens et physiciennes

## **2023 CAP Congress / Congrès de l'ACP 2023**

***(DPE/CAP) T3-8 Q-STATE: Quantum Science,  
Technology, Applications, Training, and  
Education | Science, technologie,  
applications, formation et éducation  
quantiques (DEP/ACP)***

University of New Brunswick

# Monday 19 June

13:15

## (DPE/CAP) T3-8 Q-STATE: Quantum Science, Technology, Applications, Training, and Education | Science, technologie, applications, formation et éducation quantiques (DEP/ACP)

**Session** | **Location:** Rm. 5 (max. 70), UNB Tilley Hall | **Convener:** Olivia Dimatteo

13:15-13:20 **Opening remarks**

13:20-13:30

### What do recent collapses of quantum algorithms mean for quantum computing?

**Speaker**

Thomas Baker

13:30-13:40

### The future of optical quantum information: Farther, Better, Slower, Stronger

**Speaker**

Deny Hamel

13:40-13:50

### The role of artificial neural networks in quantum many-body physics

**Speaker**

Stef Czischek

13:50-14:00

### Quantum resources in the future of quantum information

**Speaker**

Prof. Carlo Maria Scandolo

14:00-14:10

### Beyond qubits: a glimpse at bosonic quantum technologies

**Speaker**

Hoi-Kwan Lau

14:10-14:20

### The quantum computing stack

**Speaker**

Dr Julien Ross

14:20-14:35

### Quantum State Engineering using collective spin excitations

**Speaker**

Andrew MacRae

14:35-14:50

### Quantum State Engineering using collective spin excitations

**Speaker**

Andrew MacRae

14:50