

# **Microwave Amplifiers in the Quantum Regime**

**Sunday, June 1, 2025 - Friday, June 6, 2025**

**Les Houches School of Physics**

## **Scientific Program**

## **1 Next Generation TWPA's: novel circuits & operation protocols**

### **Invited speakers:**

Philippe Campagne-Ibarcq, INRIA Paris  
Peter Day, Caltech, US  
Emanuele Enrico, INRIM, Torino, Italy  
Logan Howe, NIST, Boulder, US  
Archana Kamal, University of Massachusetts, Lowell (MA), US  
Boon Kok Tan, Oxford, UK  
Maxime Malnou, NIST, Boulder, US  
Kevin O'Brien, Massachusetts Institute of Technology, US

## **2 Basic Science and Quantum Optics with TWPA's**

### **Invited speakers:**

Miles Blencowe, Dartmouth College, Hanover (NH), US  
Konrad Lehnert, JILA, US  
Federica Mantegazzini, Fondazione Bruno Kessler, Povo, IT  
Sorin Paraoanu, Aalto University, Finland  
Irfan Siddiqi, UC Berkeley, US  
Gary Steele, Delft, NL

## **3 Resonant Parametric Amplifiers**

### **Invited speakers:**

Joe Aumentado, NIST, Boulder, US  
Pasquale Scarlino, EPFL, Switzerland  
Michael Hatridge, University of Pittsburgh, Pittsburgh (PA), US  
Florent Lecocq, NIST, Boulder, US  
Laure Mercier de Lépinay, Aalto University, Aalto, FI  
R Vijay, TIFR Mumbai, India

## **4 Amplifiers and Quantum Information Processing in Research**

### **Invited speakers:**

Yvonne Gao, National University of Singapore  
Benjamin Huard, ENS Lyon, France  
Angela Kou, University of Illinois at Urbana-Champaign, US  
Mollie Schwartz, Massachusetts Institute of Technology, US  
Giovanna Tancredi, Chalmers University of Technology, Sweden

## 5 Amplifiers and Quantum Information Processing in Industry

### Invited speakers:

Baleegh Abdo, IBM Quantum, New York, US

Sisira Kanhirathingal, Rigetti Computing, Berkeley (CA), US

Ofer Naaman, Google Quantum AI

Visa Vesterinen, Arctic Instruments

Wouter Wesselink, Amplifier Team Lead @ QuantWare