

# SCHEDULE QUANTUM SOUNDS SYMPOSIUM

## June 6

9:00 Registration @ ICFO

9:30-11:00 @Auditorium, ICFO

**Eduardo Reck Miranda, Paulo Itaboraí, and Cephas Teom**  
**Lecture-Concert “Tensorial Ripples”**

11:00-11:20 Coffee and Snack Break

11:20-12:20 @Nest Hall, ICFO

**Mónica Bello (Arts-CERN), Anna Sanpera (Universitat Autònoma de Barcelona),**  
**Andrés Lewin-Richter (UPF-Phonos)**  
**Panel Discussion #1 “Quantum Sounds? What are they?”**

12:20-13:20 Symposium Lunch

13:20-14:20 @Auditorium, ICFO

**James Harley and Marcin Hałat (violinist),**  
**Lecture-Concert**  
**“Iannis Xenakis: Random Walks in Sound and Music”**

14:20-14:40 Coffee Break

14:40-15:40 @Nest Hall, ICFO

**Reserbat-Plantey (CNRS-Chrea), Voldemārs Johansons (Sound Artist) and Yu Bi**  
**(qurv.tech)**  
**Panel Discussion #2 “Photons, Vibrations and Space”**

15:40-16:40 @Auditorium, ICFO

**Spencer Topel and Florian Carle**  
**Lecture-Concert “Reflections of the Quantum Realm: Superconducting Qubits and**  
**Variable Quantum Oscillator Design for Music Synthesis”**

16:40-17:00 Coffee and Snack Break

17:00-17:45 @Auditorium, ICFO

**Bob Coecke**  
**Talk-demonstration “Quantum-compositionality enabled music composition”**

## June 7

9:30 Registration @ ICFO

10:00-11:00

**Rodney DuPlessis**

**Lecture-Concert "Composing with classical and quantum harmonic oscillators"**

11:00-11:20 Coffee and Snack Break

11:20-12:20 @Auditorium, ICFO

**Reiko Yamada, Eloy Pinol, Samuele Grandi, Maciej Lewenstein, and Flying Trees String Quartet**

**Lecture-Concert "Interpreting Quantum Randomness, Studies on Wigner Function"**

14:20-15:20 @Auditorium, ICFO

**Eli Fieldsteel**

**Lecture-Concert "LightMatrix: A Light-Sensitive Musical Control Interface"**

15:20-15:40 Coffee and Snack Break

15:40-16:40 @Nest Hall, ICFO

**Leticia Tarruell (ICFO), Jose Manuel Berenguer (University of Barcelona), Maciej Lewenstein (ICFO)**

**Panel Discussion #3 "Music and Quantum Computing"**

16:40-17:40

**James Weaver and Brian Ingmanson (IBM)**

**Lecture-Concert "Hilbert Space Deep House - Composing Electronic Dance Music with quantum states"**

## June 8

10:30-11:30 @La Salle, Ramon Llulle University

**Spencer Topel, Eoin Phillips,**

Round Table Discussion 1: Quantum future in the field of arts and humanities

11:30-11:50

Coffee break

11:50-12:50 @La Salle, Ramon Llulle University

**James Weaver (IBM), Rosa María Alsina**

Round Table Discussion 2: Quantum Computers meets the Internet of Things

13:00-14:00

**Visits to Anechoic and Reverberant Chambers**

19:00-19:30 @Hangar.org

**Ángel Faraldo (composer, performer) and Carlos Abellan (QUSIDE)**

**Joint Lecture “Looped in the Sound of Photon”**

19:30-21:00 @Hangar.org

**Ángel Faraldo, James Harley, Rodney DuPlessis, Voldemārs Johansons, Cephas Teom, Spencer Topel, Reiko Yamada (performers), Jose Manuel Berenguer (sound diffusion)**

**Quantum Random Number Generator Improvisation Concert**

## **June 9**

17:30-19:30 @Toplap Barcelona

**Eli Fieldsteel**

SuperCollidar Workshop