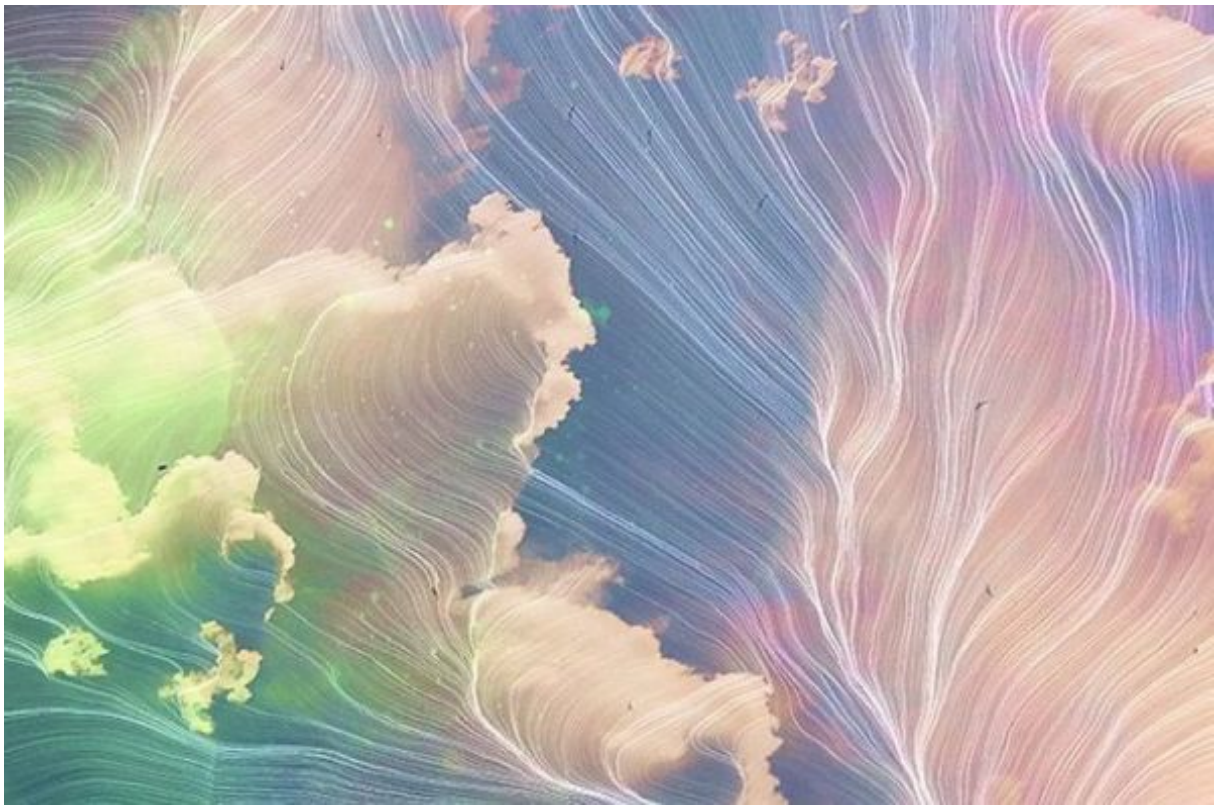

QUANTUM SOUNDS SYMPOSIUM

June 06, 2023 to June 08, 2023
ICFO Auditorium

Quantum Sounds is a symposium in which public and ICFO community can gain knowledge and inspiration from some of the most recent research done in the interface between quantum physics and music composition, data sonification, interactive sound interface, sound programming and audio software development.
The symposium consists of a series of talks, lecture recitals (hybrid between lecture and performance) and Quantum Random Number Generator jam sessions.
In addition, the invitees will visit labs at ICFO and lead themed small group discussions with registered participants.
Symposium Venues:

Day 6 and 7 June the sessions will be hold at ICFO (Castelldefels).

ICFO: Mediterranean Technology Park, Avinguda Carl Friedrich Gauss, 3, 08860 Castelldefels. See Google Maps.

Day 8 June the sessions will be hold at La Salle-Ramon Llull University and Hangar.org (Barcelona)

La Salle- URL: Carrer de Sant Joan de la Salle, 42, 08022 Barcelona, Sala de Congresos. Closest metro station, El Putxet L7. (10 min walk). See Google Maps.
The Hangar.org: Carrer Emilia Coranty, 16, 08018 Barcelona. See Google Maps.
Presenters:

Eduardo Reck Miranda, Paulo Itaborai and Cephas Teom (University of Plymouth). Lecture-Concert i¿½Tensorial Ripplesi

Eli Fieldsteel (Experimental Music Studios, University of Illinois). Lecture-Concert i¿½LightMatrix: A Light-Sensitive Musical Control Interfacei

James Weaver and Brian Ingmanson (IBM). Lecture-Concert i¿½Hilbert Space Deep Hous - Composing Electronic Dance Music with quantum states

Rodney DuPlessis (Worcester Polytechnic Institute). Lecture-Concert i¿½Composing wi h classical and quantum harmonic oscillatorsi

Spencer Topel (Physical Synthesis) **and Florian Carle** (Yale Quantum Institute). Lecture-Concert i¿½Reflections of the Quantum Realm: Superconducting Qubits and Variab e Quantum Oscillator Design for Music Synthesisi

Angel Faraldo (composer, performer) **and Carlos Abellan (QUSIDE)**. Joint Talk i¿½Looped in the Sound of Photon

Bob Coecke (Quantinuum). Talk-Demonstration "Quantum-compositionality enabled musical composition"

James Harley (University of Guelph) **and Marcin Halat** (Violin). Lecture-Concert "Iannis Xenakis: Random Walks in Sound and Music"

Pannel Discussions:

Monica Bello (Arts-CERN), Anna Sanpera (Universitat Autonoma de Barcelona), Andres Lewin-Richter (UPF-Phonos). Panel Discussion #1 i¿½Quantum Sounds? What are they?i¿½

Reserbat-Plantey (CNRS-Chrea), Voldem?rs Johansons (Sound Artist) and Yu Bi (qurv.tech). Panel Discussion #2 i¿½Photons, Vibrations and Spacei

Leticia Tarruell (ICFO), Maciej Lewenstein (ICFO), Jose Manuel Berenguer (University of Barcelona). Panel Discussion #3 i¿½Music and Quantum Computingi

Spencer Topel, Eoin Edward Phillips (La Salle-URL), Artur Garcia Saez (BSC-CNS). . Round Table Discussion #4: "Quantum future in the field of arts and humanities"

James Weaver (IBM), Rosa Ma Alsina-Pages (La Salle-URL), Eduardo Reck Miranda (University of Plymouth). Round Table Discussion #5: "Quantum Computers and Creativity

Organizers:

Dr. Reiko Yamada (ICFO)
Prof. Dr. Maciej Lewenstein (ICFO)

In collaboration with:

Dr. Osvaldo Jimenez Farias (La Salle-URL)
Dr. Jose Manuel Berenguer (University of Barcelona, Hangar.org)

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