Juantum Summit

Wednesday, 27 January 2016 • 8:00 AM - 7:00 PM

8:00AM Continental Breakfast

Session I • Chair: Gil Refael • IQIM, Caltech

9:00AM What Do We Do with a Quantum Computer?

Krysta Svore · Senior Researcher, QuArC, Microsoft

9:45AM Topological Quantum Computing: Progress & Opportunities

Jason Alicea · Professor of Theoretical Physics, Caltech

10:30_{AM} Break

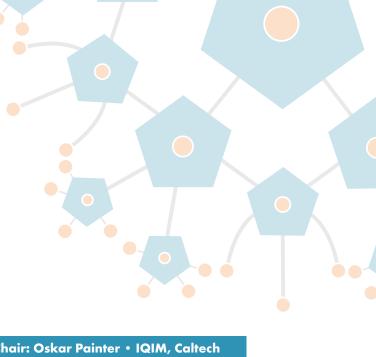
Session II • Panel Discussion

11:00AM Jennifer Ouellette · Senior Science Editor, Gizmodo.com [Moderator]

A Conversation on the Future of Quantum Computers Ray Beausoleil · HP Laboratories Charles Bennett · IBM Parsa Bonderson · Microsoft Jim Clarke · Intel

Hartmut Neven · Google Raymond Laflamme · Institute for Quantum Computing

12:30_{PM} Lunch



Session III • Chair: Oskar Painter • IQIM, Caltech

2:00PM Towards Feynman's Dream: **Quantum Simulation with Superconducting Qubits**

John Martinis · Research Scientist, Google

Session IV • Chair: Manuel Endres • IQIM, Caltech

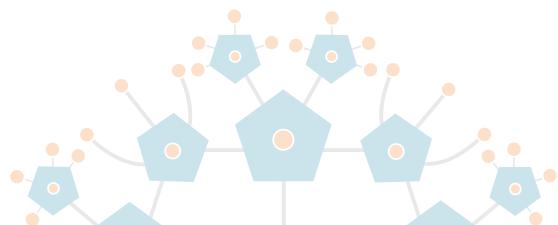
3:00pm The Sound of Silence: Acoustic Quantum Transducers Oskar Painter · John G. Braun Professor of Applied Physics, Caltech

3:45_{PM} Entangled Trapped Ions David Wineland · Nobel Laureate, NIST

4:30_{PM} Break

5:00pm Screening

The PHD Movie 2: Still In Grad School



Graphical depiction of a holographic code, which models the emergence of spacetime from quantum entanglement.