

UC SANTA BARBARA

# THE *Current*

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## **And the Fritz London Memorial Prize Goes To...**

John Martinis, a professor in UC Santa Barbara's Department of Physics, has received the 2014 Fritz London Memorial Prize. He shares the honor with Michel Devoret and Robert Schoelkopf of Yale University.

Martinis was recognized for his fundamental and pioneering experimental advances in quantum control, quantum information processing and quantum optics with superconducting qubits and microwave photons.

"I am greatly honored to be awarded the London Prize," said Martinis, "and would like to thank Andrew Cleland and the many graduate students and postdoctoral researchers who worked with me that made this research possible."

Martinis earned his Bachelor of Science and Ph.D. in physics at UC Berkeley. Since 2002 his research efforts have focused on building a quantum computer using superconducting qubits. Martinis was a National Institute for Standards and Technology Fellow and is a Fellow of the American Physical Society. He joined the faculty in 2004. Along with Cleland, also a physics professor, he received the American Association for the Advancement of Science's Breakthrough of the Year award in 2010 for work showing quantum behavior of a mechanical oscillator.

Martinis is the second faculty member to win the London Prize. Guenter Ahlers, professor of physics, was the recipient in 1978.

Initiated in 1957, the Fritz London Memorial Prize is an international honor awarded every three years. The prize recognizes outstanding experimental and theoretical contributions to low-temperature physics, also known as cryogenics. This branch of physics explores how matter behaves at very low temperatures, sometimes approaching absolute zero, as well as various phenomena that occur only at such temperatures. The prize will be awarded in August at the International Meeting of Low Temperature Physics in Buenos Aires.

Fritz London was a distinguished European scientist who in 1939 emigrated to the United States where he became a professor of chemistry and physics at Duke University.

Ten recipients of the Fritz London Memorial Prize have subsequently won the Nobel Prize. John Bardeen, the only Nobel Laureate twice awarded the Nobel Prize in Physics (1956, 1972), donated his portion of his second prize to Duke for an endowment, which supports the Fritz London Memorial Prize and the annual Fritz London lecture at the university.

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## **About UC Santa Barbara**

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.