Michel Devoret is the F. W. Beinecke Professor of Applied Physics and Physics at Yale University. He graduated from *Ecole Nationale Superieure des Telecommunications* in Paris in 1975 and started graduate work in molecular quantum physics at the University of Orsay. He then joined Professor Anatole Abragam's laboratory in CEA-Saclay for his thesis work on NMR in solid hydrogen, and received his PhD from Paris University in 1982. His two post-doctoral years in Professor John Clarke's laboratory at the University of California, Berkeley, were pivotal in his research orientation: working together with graduate student John Martinis, he discovered the macroscopic level quantization of a Josephson junction, now the basis for superconducting quantum bits. Upon his return at Saclay, he pursued this research on quantum mechanical electronics, starting his own research group with Daniel Esteve and Cristian Urbina. In this new type of electronics, electrical collective degrees of freedom like currents and voltages behave quantum mechanically. Such mesoscopic phenomena underlie the realization of quantum information processing superconducting devices, which is presently his major research goal. The main achievements of the "quantronics group" under Michel Devoret's direction are the measurement of the traversal time of tunneling, the invention of the single electron pump, the first observation of the charge of Cooper pairs and the first measurement of the effect of atomic valence on the conductance of a single atom. The group's Cooper pair box device led to the first observation of Ramsey interference in a superconducting artificial atom. Michel Devoret has received the Ampere Prize of the French Academy of Science (together with Daniel Esteve, 1991), the Descartes-Huygens Prize of the Royal Academy of Science of the Netherlands (1996) and the Europhysics-Agilent Prize of the European Physical Society (together with Daniel Esteve, Hans Mooij and Yasunobu Nakamura, 2004). He has been appointed to the *College de France*, where he taught from 2007 to 2012. Michel Devoret is a member of the American Academy of Arts and Sciences (2003) and a member of the French Academy of Sciences (2007). His present work at Yale, in collaboration with Professors Robert Schoelkopf and Steven Girvin, focuses on quantum limited amplification with Josephson circuits for quantum signal processing. Michel Devoret, together with Professor Leonid Glazman, also continues exploring the properties of superconducting artificial atoms.

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