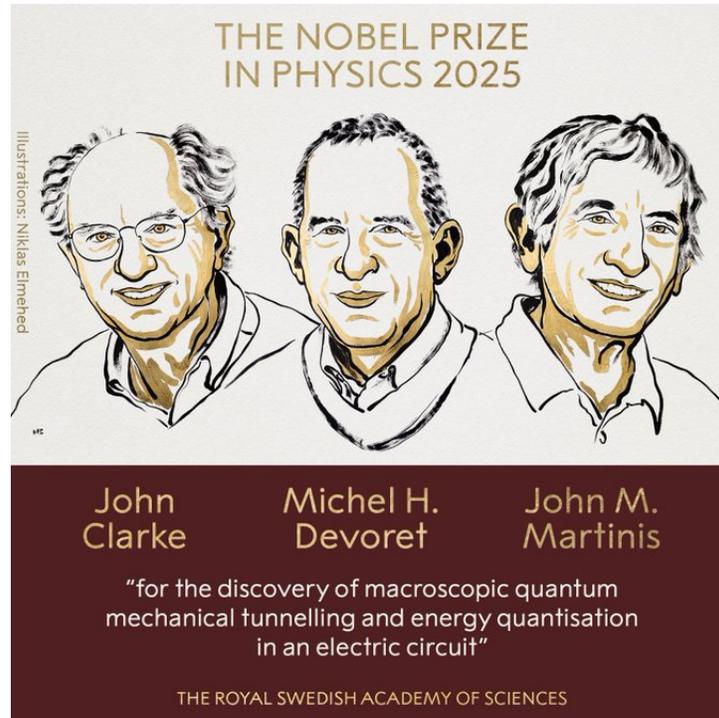

Scientists Win 2025 Nobel Prize for Quantum Physics Breakthrough



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Stockholm, 7 October 2025 – Three U.S.-based scientists, John Clarke, Michel H. Devoret, and John M. Martinis, have been awarded the 2025 Nobel Prize in Physics for their groundbreaking

discovery of macroscopic quantum mechanical tunnelling and energy quantisation in an electric circuit, the Royal Swedish Academy of Sciences announced on Tuesday.

Their pioneering experiments demonstrated that quantum physics, typically observed only at the microscopic level, can manifest on a macroscopic scale. This phenomenon allows particles to pass through barriers, known as quantum tunnelling, even when many particles are involved, defying traditional expectations.

“Their experiments on a chip revealed quantum physics in action,” the Academy said, emphasizing that the findings pave the way for advances in quantum technology, including quantum computers, sensors, and secure cryptography.

Olle Eriksson, chair of the Nobel Committee for Physics, praised the discovery, saying, “It is wonderful to celebrate how century-old quantum mechanics continues to offer new surprises. It is also enormously useful, as quantum mechanics underpins all digital technology today.”

The laureates’ work not only deepens understanding of fundamental physics but also opens practical avenues for developing next-generation technologies that could transform computing, communications, and scientific research.