Quantized Conductance of Majorana Zero Mode in the Vortex of the Topological Superconductor $(Li_{0.84}Fe_{0.16})OHFeSe$

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The Majorana zero mode (MZM), which manifests as an exotic neutral excitation in superconductors, is the building block of topological quantum computing. It has recently been found in the vortices of several iron-based superconductors as a zero-bias conductance peak in tunneling spectroscopy. In particular, a clean and robust MZM has been observed in the cores of free vortices in $(Li_{0.84}Fe_{0.16})OHFeSe$. Here using scanning tunneling spectroscopy, we demonstrate that Majorana-induced resonant Andreev reflection occurs between the STM tip and this zero-bias bound state, and consequently, the conductance at zero bias is quantized as $2e^2/h$. Our results present a hallmark signature of the MZM in the vortex of an intrinsic topological superconductor, together with its intriguing behavior.