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The Superconducting Transition in Al Nanowires PAUL ALIOTTA, JOHN FREE, Harvard University and Eastern Nazarene College, ROBERT WEST-ERVELT, Harvard University — Strong evidence for macroscopic quantum tunneling has been presented in Al wires with diameters less than 10 nm [1], which is much lower than the material's coherence length. We have investigated the superconducting transition and evidence for macroscopic quantum tunneling in Al nanowires with diameters ranging from 10 to 40nm. We will present data for these wires.

[1] F. Altomare, Phys. Rev. Lett. 97, 017001 (2006).

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