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Atomically-resolved Imaging of Electrical Bearkdown of Multi-walled Carbon Nanotubes WILLI MICKELSON, TOM YUZVINSKY, GAVI BEGTRUP, ADAM FENNIMORE, ANDRAS KIS, STEVE KONSEK, B.C. REGAN, SHAUL ALONI, ALEX ZETTL, University of California, Berkeley — We report on the controllable electrical breakdown of multi- walled carbon nanotubes (MWCNTs) in air. We see current steps that correspond to the removal of individual walls. This is confirmed by high resolution transmission electron microscopy (HRTEM) of MWCNTs over thin membranes. Using this technique we able to determine how the atomic structure changes the transport through MWCNTs.

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