

Abstract Submitted
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Extracting Momentum Resolved Tunneling Curves of Bi2212 from ARPES T. J. REBER, N. C. PLUMB, Z. SUN, Q. WANG, University of Colorado, Y. AIURA, K. OKA, H. EISAKI, AIST, M. HERMELE, D. S. DESSAU, University of Colorado — Taking advantage of the excellent resolution of low energy ARPES, we can resolve the thermally populated excited states above the Fermi energy near the node of Bi2212, even at quite low temperatures. By integrating the Momentum Distribution Curves (MDCs) and dividing out by the Fermi function, we extract what are essentially momentum-resolved tunneling curves, i.e. curves which vary as a function of location along the Fermi surface. We analyze the scattering rates using a Dynes-style formula and compare these results with what is found from a direct analysis of MDC and EDC widths. Temperature and angular dependences will also be discussed in detail.

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