

Abstract Submitted
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Near-Fermi electronic structure of $\text{La}_{2-2x}\text{Sr}_{1+2x}\text{Mn}_2\text{O}_7$ revealed by ARPES Z. SUN, J. F. DOUGLAS, D. S. DESSAU, University of Colorado, Boulder, CO 80309, Y. -D. CHUANG, A. V. FEDOROV, Lawrence Berkeley National Lab, Berkeley, CA 94720, H. LIN, M. LINDROOS, S. SAHRAKORPI, R. S. MARKIEWICZ, A. BANSIL, Northeastern University, Boston, MA 02115, H. ZHENG, J. F. MITCHELL, Argonne National Laboratory, Argonne, IL 60439, T. KIMURA, Y. TOKURA, University of Tokyo, Tokyo, Japan 113-8656 — Angle-resolved photoemission experiments were performed on the bi-layer manganite $\text{La}_{2-2x}\text{Sr}_{1+2x}\text{Mn}_2\text{O}_7$ as a function of doping and temperature. High resolution and sensitivity allows us to observe the fine details including bi-layer splitting, dispersion kinks, electron-phonon coupling, and pseudogaps. We discuss new insights into the underlying physics of these compounds, as well as a comparison of some of these properties to what is observed in the cuprates.

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