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Spectral function analysis of an e-doped Hi-Tc superconductor near optimal doping, revisited FELIX SCHMITT, WEI-SHENG LEE, DONG HUI LU, WORAWAT MEEVASANA, EUGENE MOTOYAMA, MARTIN GREVEN, ZHI-XUN SHEN, Departments of Physics, Applied Physics and Stanford Synchrotron Radiation Laboratory, Stanford University, Stanford, California 94305 — By comparison with the p-doped high transition temperature superconductors, their e-doped counterparts might give further insight into the unusual underlying physics. High resolution angle-resolved photoemission spectroscopy (ARPES) data of an e-doped cuprate near optimal doping is presented to further enrich previous comprehensive work on the subject ¹. Spectral function analysis is also used to discuss band renormalizations. Other findings will be discussed as well.

¹N.P. Armitage et al., PRB 68, 064517 (2003); H. Matsui et al., PRLetters 94, 047005 (2005)

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