

Abstract Submitted
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**Comparative study of the MDC and two-dimensional
analysis of ARPES intensity for Bi2212 bilayer superconductor**

JIN MO BOK, HAN-YONG CHOI, SungKyunKwan University, JUN-FENG HE, X.J. ZHOU, Chinese Academy of Sciences, C.M. VARMA, University of California — The momentum distribution curve (MDC) analysis is commonly used to analyze the ARPES data. A problem of the MDC analysis, however, is that the matrix elements turn out to be energy dependent. To remedy this we take the two-dimensional (2D) analysis of the ARPES intensity as reported by Meevasana et. al. [1]. We analyze the overdoped Bi2212 superconductor ARPES data by performing both 2D and MDC analysis taking the bilayer splitting into consideration. The deduced self-energy and Eliashberg function from both analysis will be compared and presented.

[1] Meevasana et. al. Phys. Rev. B 77, 104506 (2008).

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