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RPES of the Electron-Doped Cuprates Studied by the Variational

Monte-Carlo Method TING-KUO LEE, Institute of Physics, Academia Sinica, Taiwan, CHUNG-PIN CHOU, Institute of Physics, Academia Sinica, Taiwan — We use a variational approach to gain insight into low-energy states of extended t-J model in the electron-doped regime. Compared with the recent results on $Nd_{1.87}Ce_{0.13}CuO_4$ obtained by ARPES, we show that strong correlations lead to qualitatively similar trends in ARPES spectra and Fermi surface topology. Additionally, the results about Fermi surface evolution as a function of doping density will be discussed.

Ting-kuo Lee Institute of Physics, Academia Sinica, Taiwan

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