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*d-wave Pairing Amplitude and Particle-hole Asymmetry of the t–J type models: Implication from the Spectral Weight Analysis* CHUNG-PIN CHOU, National Tsing-Hua University, Taiwan, TING-KUO LEE, Academia Sinica, Taiwan, CHANG-MING HO, Tam Kang University — By using the projected variational wave functions (VWF), we study the quasiparticle spectral weight (QPSW) of hole-doped cuprates in the $t–J$ type models. The QPSW $Z^+$ for adding an electron shows a pocket structure outside the Fermi surface that is related to the momentum distribution function $n_k$. Based on our VWF, $Z^-$ for removing an electron can be proven to have a simple relation among the pairing amplitude and $Z^+$. In addition, we also find that strong correlations mainly causes the particle-hole asymmetry of the low-energy tunneling spectra.

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