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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 $n_{\mathbf{k}}$. 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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