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Some Comparisons of RVB Theories and High Tc Cu-oxides KAIYU YANG, Department of Physics, The University of Hong Kong, Hong Kong, C.T. SHIH, Department of Physics, Tunghai University, Taichung, Taiwan, C.P. CHOU, S.M. HUANG, T.K. LEE, Inst. of Physics, Academia Sinica, Taipei, Taiwan, T. XIANG, Institute of Theoretical Physics and Interdisciplinary Center of Theoretical Studies, Academia Sinica, Beijing, F.C. ZHANG, Department of Physics, The University of Hong Kong, Hong Kong — We report extensive comparisons of the doping dependences of physical properties of the RVB theories and the high Tc Cu- oxides. We study an extended t-J model with the second and third-nearestneighboring hopping terms by using the renormalized mean field theory and the variational Monte Carlo and the power Lanczos methods. We calculate the quantites related to the nodal quasiparticle physics as well as the thermal and spectral properties of the model and compare them to the available experiments

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