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**Pairing interaction near a nematic QCP of a 3-band $CuO_2$ model**
THOMAS MAIER, Oak Ridge National Lab, DOUGLAS SCALAPINO, University of California, Santa Barbara — We calculate the pairing interaction and the k-dependence of the gap function associated with the nematic charge fluctuations of a $CuO_2$ model. We find that the nematic pairing interaction is attractive for small momentum transfer and that it gives rise to $d$-wave pairing. As the doping $p$ approaches a quantum critical point, the strength of this pairing increases and higher $d$-wave harmonics contribute to the $k$-dependence of the superconducting gap function, reflecting the longer range nature of the nematic fluctuations.

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