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Gap anisotropy and universal pairing scale in a spin fluctuation model for cuprates ARTEM ABANOV, Texas A&M University, ANDREY CHUBUKOV, University of Wisconsin, MICHAEL NORMAN, Argonne National Laboratory — We consider the evolution of $d_{x^2-y^2}$ pairing, mediated by nearly critical spin fluctuations, with the coupling strength. We show that the onset temperature for pairing, T^* , smoothly evolves between weak and strong coupling, passing through a broad maximum at intermediate coupling. At strong coupling, T^* is of order the magnetic exchange energy J . We argue that for all couplings, pairing is confined to the vicinity of the Fermi surface. We also find that thermal spin fluctuations only modestly reduce T^* , even at criticality, but they substantially smooth the gap anisotropy. The latter evolves with coupling, being the largest at weak coupling.

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