THE VAN HOVE SCENARIO, P-WAVE PAIRING AND DISORDERED Sr_2RuO_4.

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9.7 cm

On the basis of a simple 2-dimensional lattice model we study the degradation of T_C with increasing disorder in p-wave superconductors. We deal with the electron-electron attraction in the Hartree-Fock-Gorkov Approximation and treat the disorder in the Coherent Potential Approximation. We highlight the influence of a van Hove singularity near E_F on the T_C vs. residual resistivity curve and comment on the relevance of our results to experiments on Sr_2RuO_4.

13.4 cm

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