

Abstract Submitted
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Effects of anisotropic impurity scattering on thermal conductivity and thermoelectric effect in unconventional superconductors MIKAEL FOGELSTROM, Applied Quantum Physics, MC2, Chalmers Technical University Gothenburg S-41 296 Sweden, TOMAS LOFWANDER, Institut für Theoretische Festkörperphysik — We report analytic and numerical results for the thermal conductivity and thermoelectric effect in unconventional superconductors with a dilute random distribution of impurities. We present new results for the effects of anisotropic impurity scattering. For low temperatures we present analytic results for the universal limit asymptotics and the T^3 corrections. Only the $T \rightarrow 0$ value of the thermal conductivity remains universal (independent of the impurity scattering potential). All other quantities depend on the phase shifts and vertex corrections.

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