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The Spin Diffusion Coefficient of Superfluid ^{3}He in the A_1- phase
AYODEJU AWOBODE, ANTHONY LEGGETT, University of Illinois at Urbana Champaign — Using the Boltzmann kinetic approach and perturbation theory, an approximate expression describing the variation with temperature, of the spin diffusion coefficient in the A_1-phase of ^{3}He is derived. It is observed that for temperatures close to the transition temperature T_c, the spin diffusion coefficient $D \sim (T_c - T)^{1/2}$ + *const.* Comparison of the theoretical result with related experimental measurements is discussed.

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