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Quantum oscillations in non-Fermi-liquid metals STEPHEN JULIAN, ALIX MCCOLLAM, PATRICK ROURKE, University of Toronto, JACQUES FLOUQUET, DAI AOKI, CEA France — The temperature dependence of de Haas van Alphen (dHvA) and other quantum oscillations is governed in a Fermi liquid by the Lifshitz-Kosevich (LK) equation¹. Several authors ² have extended the LK theory to non-Fermi-liquid metals, but these treatments tend to be very technical. We will give a simple interpretation of the non-Fermi-liquid effects that arise in these theories, and will briefly discuss the possible observation of non-Fermi-liquid temperature dependence in dHvA oscillations in CeCoIn₅.

¹see e.g. D. Shoenberg, *Magnetic Oscillations in Metals*, CUP 1984 ²e.g. A. Wasserman and M. Springford, Adv. Phys.**45** (1996) 471, and references therein.

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