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) equation\(^1\). 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 CeCoIn\(_5\).

\(^1\)see e.g. D. Shoenberg, *Magnetic Oscillations in Metals*, CUP 1984

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