



Fig. 1. Effect of pressure on the superconducting transition temperature for In, Nb_3Sn and Sn. The solid curve is a plot of theoretical values. Experimental points are those of ref. 3 for Sn, In and ref. 4 for Nb_3Sn . The theoretical curve for Nb_3Sn is drawn on the basis of the energy gap relation $\epsilon_0 = 0.65 kT_c$. [Rev. Modern Phys. 36 (1964) 213].

the same atom which is induced by local distur-

tions of the surrounding (intra-atomic mixing) [5]. Another mechanism is the crystal field effects which connect states on neighbouring atoms (inter-atomic mixing) as envisaged by Anderson [6]. Estimates show that the magnitude of such matrix elements will be of the order of 1000 cm^{-1} or so [5, 6].

That pressure effects may indeed cause scattering of electrons from one band to another near the Fermi-surface seems to have been realised in metals and semi-conductors [7, 8].

A detailed account of this work will be published elsewhere.

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