

Superconductivity in metals without inversion symmetry

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During the last two years the topics of superconductivity in materials without inversion center has experienced renewed interest, initiated through the discovery of the heavy Fermion system CePt_3Si , and several other compounds found subsequently. These superconductors show a number of unusual properties, in particular in a high magnetic field. The key to the understanding of these features lies very likely in the presence of antisymmetric spin-orbit coupling, whose role for superconductivity and some normal state properties will be discussed in this presentation. Moreover, the present experimental situation will be reviewed.