Spin Seebeck and Spin Peltier Effects

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The flow of electron spin, the so-called spin current, is a key concept in the recent progress in spintronics [1]. The generation of the spin current by heat is the spin Seebeck effect [2] and has been studied extensively [3]. Its reciprocal is the spin Peltier effect and has recently been reported [4,5].

We present the microscopic theory of the inter-conversion between heat and spin current in metal /ferromagnet hybrids [6,7].

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