

Abstract Submitted
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Anomalous Nernst Effect in Ferromagnets DI XIAO, QIAN NIU,
Department of Physics, The University of Texas, Austin, TX 78703 — We study the
intrinsic contribution to the anomalous Nernst effect in ferromagnets at low temper-
atures. It is shown that the anomalous Nernst conductivity is of topological nature
and can be related to the Berry phase of occupied Bloch states. In ferromagnets,
there may be nonzero magnetization current even in thermodynamic equilibrium.
It can significantly change the thermoelectric transport coefficients. The Onsager
relation is established for the charge and heat transport coefficients. Our theory
well explains recent experimental result.

Di Xiao
Department of Physics, The University of Texas, Austin, TX 78703

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