

Selected Publications, Norman E. Phillips

221. Specific heat of $\text{Na}_{0.3}\text{CoO}_2 \cdot 1.3\text{H}_2\text{O}$: Two energy gaps, non-magnetic pair breaking, strong fluctuations in the superconducting state, and effects of sample age, N. Oeschler, R. A. Fisher, N. E. Phillips, J. E. Gordon, M.-L. Foo, and R. J. Cava, *Phys. Rev. B* **78**, 054528 (2008).
220. Evidence for two-band superconductivity and non-magnetic pair breaking in $\text{Na}_{0.3}\text{CoO}_2 \cdot 1.3\text{H}_2\text{O}$; effects of sample age, N. Oeschler, R. A. Fisher, N. E. Phillips, J. E. Gordon, M.-L. Foo, and R. J. Cava, *Europhys. Lett.* **82**, 47011 (2008).
219. Specific Heat of $\text{Na}_{0.3}\text{CoO}_2 \cdot 1.3\text{H}_2\text{O}$, a Novel Superconductor with Structural and Electronic Similarities to the High- T_c Cuprates, N. Oeschler, R. A. Fisher, N. E. Phillips, J. E. Gordon, M.-L. Foo, and R. J. Cava, in *High T_c Superconductors and Related Transition Metal Oxides Special Contributions in Honor of K. Alex Müller on the Occasion of his 80th Birthday*, edited by A. Bussmann-Holder and H. Keller (Springer-Verlag, Berlin Heidelberg, 2007) pp 259 - 268.
218. High T_c Superconductors: Thermodynamic Properties, R. A. Fisher, J. E. Gordon, and N. E. Phillips, in *Handbook of High-Temperature Superconductivity*, edited by J. R. Schrieffer and J. S. Brooks (Springer, Berlin, 2007) Chap.9, pp 345 – 397.
215. Specific Heats of $\text{Mg}(\text{B}_{1-x}\text{C}_x)_2$: Two-Gap Superconductors, R. A. Fisher, N. Oeschler, N. E. Phillips, W. E. Mickelson, and A. Zettl, in *Low Temperature Physics, 24th International Conference on Low Temperature Physics*, edited by Y. Takano, S. P. Hershfield, S. O. Hill, P. J. Hirschfeld, and A. M. Goldman, *AIP Conference Proceedings* **850**, 601 (2006).
214. Ambient-pressure specific heat of single-crystal UGe_2 . J. C. Lashley, R. A. Fisher, J. Flouquet, F. Hardy, A. Huxley, and N. E. Phillips, *Physica B* **378-380**, 961 (2006).
213. Antiferromagnetic Ordering Coupled with Phonon Mode Anomalies in Rare-Earth Cuprate NdCu_2O_4 , Probed by Quadruple Resonance and Raman Spectroscopy, S. Wada, H. Sugita, D. Sawai, T. Koyama, T. Mito, M. Osada, R. A. Fisher, N. E. Phillips, J. L. Luce, and A. M. Stacy, *J. Phys. Soc. Japan* **74**, 2076 (2005).
212. Specific heat of single crystal HfV_2 : Strong-coupling conventional superconductivity and the effect of the martensitic transition, F. R. Drymiotis, J. C. Lashley, T. Kimura, G. Lawes, J. L. Smith, D. J. Thoma, R. A. Fisher, N. E. Phillips, Ya. Mudryk, V. K. Pecharsky, X. Mora, and A. Planes, *Phys. Rev. B* **72**, 024543 (2005).
201. Specific heat of Mg^{11}B_2 , R.A. Fisher, Guangtao Li, J.C. Lashley, F. Bouquet, N.E. Phillips, D.G. Hinks, J.D. Jorgensen, and G.W. Crabtree, *Physica C* **385**, 180 (2003).

196. Specific heat of CeRhIn_5 : Pressure-driven evolution of the ground state from antiferromagnetism to superconductivity, R.A. Fisher, F. Bouquet, N.E. Phillips, M.F. Hundley, P.G. Pagliuso, J.L. Sarro, Z. Fisk, and J. D. Thompson, *Phys. Rev. B* **65**, 224509 (2002).
194. Specific heat and thermal expansion of $\text{La}_{0.65}\text{Ca}_{0.35}\text{MnO}_3$: Magnetic field dependence, isotope effect, and evidence for a first-order transition, J. E. Gordon, C. Marcenat, J. P. Franck, I. Isaac, Guanwen Zhang, R. Lortz, C. Meingast, F. Bouquet, R. A. Fisher, and N. E. Phillips, *Phys. Rev. B*, **65**, 24441 (2001).
193. Superconductivity and magnetism in a new class of heavy-fermion materials, J.D. Thompson, R. Movshovich, Z. Fisk, F. Bouquet, N.J. Curro, R.A. Fisher, P.C. Hammel, H. Hegger, M.F. Hundley, M. Jaime, P. G. Pagliuso, C. Petrovic, N.E. Phillips, and J. L. Sarrao, *J. Magn. Magn. Mater*, **226-230**, 5 (2001).
192. Phenomenological two-gap model for the specific heat of MgB_2 , F. Bouquet, Y. Wang, R. A. Fisher, D. G. Hinks, J. D. Jorgensen, A. Junod, and N. E. Phillips, *Europhys. Lett.* **56**, 856 (2001).
191. An unusual phase transition to a second liquid vortex phase in the superconductor $\text{YBa}_2\text{Cu}_3\text{O}_7$, F. Bouquet, C. Marcenat, E. Steep, R. Calemczuk, W. K. Kwok, U. Welp, G. W. Crabtree, R. A. Fisher, N. E. Phillips, and A. Schilling, *Nature* **441**, 448 (2001).
190. Specific Heat of Mg^{11}B_2 : Evidence for a Second Energy Gap, F. Bouquet, R. A. Fisher, N.E. Phillips, D.G. Hinks, and J.D. Jorgensen, *Phys. Rev. Lett.* **87**, 047001 (2001).
184. Superconducting-Normal Phase Transition in $(\text{B}_{1-x}\text{K}_x)\text{BiO}_3$, $x=0.40, 0.47$, B. F. Woodfield, D. A. Wright, R. A. Fisher, and N. E. Phillips, *Phys. Rev. Lett.* **83**, 4622 (1999).
180. Low-Temperature Specific Heat of $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$, $0 \leq \delta \leq 0.2$: Evidence for d Wave Pairing, D. A. Wright, J. P. Emerson, B. F. Woodfield, J. E. Gordon, R. A. Fisher, and N. E. Phillips, *Phys. Rev. Lett.* **82**, 1550 (1999).
179. Specific Heat of $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$, $0 \leq \delta \leq 0.2$: Concentrations of Paramagnetic Centers and Values of Other Parameters as Functions of δ , J. P. Emerson, D. A. Wright, B. F. Woodfield, J. E. Gordon, R. A. Fisher, and N. E. Phillips, *Phys. Rev. Lett.* **82**, 1546 (1999).
168. Anisotropic Latent Heat of Vortex-Lattice Melting in Untwinned $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$, A. Schilling, R. A. Fisher, N. E. Phillips, U. Welp, W. K. Kwok, and G. W. Crabtree, *Phys. Rev. Lett.* **78**, 4833 (1997).

164. Calorimetric measurement of the latent heat of vortex-lattice melting in untwinned $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$, A. Schilling, R. A. Fisher, N. E. Phillips, U. Welp, D. Dasgupta, W. K. Kwok, and G. W. Crabtree, *Nature* **382**, 791 (1996).
151. Magnetism and Superconductivity in Heavy Fermion Systems, J. P. Brison, N. Keller, P. Lejay, J. L. Tholence, A. Huxley, N. Bernhoeft, A. Buzdin, B. Fak, J. Flouquet, L. Schmidt, A. Stepanov, R. A. Fisher, N. E. Phillips, and C. Vettier, *J. Low Temp. Phys.* **95**, 145 (1994).
144. Unusual Ground-State Properties of UPd_2Al_3 : Implications for the Coexistence of Heavy Fermion Superconductivity and Local-Moment Antiferromagnetism, R. Caspary, P. Hellmann, M. Keller, G. Sparn, C. Wassilew, R. Kohler, C. Geibel, C. Schank, F. Steglich, and N. E. Phillips, *Phys. Rev. Lett.* **71**, 2146 (1993).
111. Specific Heat of UPt_3 : Evidence for Unconventional Superconductivity, R. A. Fisher, S. Kim, B. F. Woodfield, N. E. Phillips, L. Taillefer, K. Hasselbach, J. Flouquet, A. L. Giorgi, and J. L. Smith, *Phys. Rev. Lett.* **62**, 1411 (1989).
88. Pressure Dependence of the Low-Temperature Specific Heat of the Heavy-Fermion Compound CeAl_3 , G. E. Brodale, R. A. Fisher, N. E. Phillips, and J. Flouquet, *Phys. Rev. Lett.* **56**, 390 (1986).
81. SPECIFIC HEAT OF ^3He IN THE FERMI LIQUID REGION, M. C. Mayberry, W. E. Fogle and N. E. Phillips, in *Quantum Fluids and Solids*, edited by E. D. Adams and G. G. Ihas, *AIP Conf. Proc.* **103**, 161 (1983).
80. Specific-Heat Anomaly and Phase Boundary for the Spin-Glass-Paramagnet Transition in CuMn , W. E. Fogle, J. D. Boyer, R. A. Fisher, and N. E. Phillips, *Phys. Rev. Lett.* **50**, 1815 (1983).
58. Improved Thermal Contact at Ultralow Temperatures Between ^3He and Metals Containing Magnetic Impurities, O. Avenel, M. P. Berglund, R. G. Gylling, N. E. Phillips, A. Vetleseter, and M. Vuorio, *Phys. Rev. Lett.* **31**, 76 (1973).
54. Thermodynamic Properties of ^4He . The hcp Phase at Low Densities, W. R. Gardner, J. K. Hoffer, and N. E. Phillips, *Phys. Rev. A* **7**, 1029 (1972).
48. Search for Superconductivity in Lithium and Magnesium, T. L. Thorp, B. B. Triplett, W. D. Brewer, M. L. Cohen, N. E. Phillips, D. A. Shirley and J. E. Templeton, *J. Low Temp. Phys.* **3**, 589 (1971).
42. Calorimetric Evidence for Positive Phonon Dispersion in Liquid Helium-4, N. E. Phillips, C. G. Waterfield, and J. K. Hoffer, *Phys. Rev. Lett.* **25**, 1260 (1970).
35. Instability Modes Prior to Melting, B. J. Alder, W. R. Gardner, J. K. Hoffer, N. E. Phillips and D. A. Young, *Phys. Rev. Lett.* **21**, 732 (1968).

26. Superconductivity of Beta-Uranium, B. T. Matthias, T. H. Geballe, E. Corenzwit, K. Andres, G. W. Hull, J. C. Ho, N. E. Phillips and K. Wohlleben, *Science* **151**, 985 (1966).

5. Heat Capacity of Aluminum between 0.1K and 4.0K, Norman E. Phillips, *Phys. Rev.* **114**, 676 (1959).

4. HEAT CAPACITY OF SUPERCONDUCTING ZINC, Norman E. Phillips, *Phys. Rev. Lett*, **1**, 363 (1958).

2. Thermal Conductivity of Indium-Thallium Alloys in the Normal and Superconducting States, Norman E. Phillips, *Phys. Rev.* **100**, 1719 (1955).

1. THE EMULSION POLYMERIZATION OF ISOPRENE III. THE MEASUREMENT OF THE AMOUNT OF VINYL GROUPS, Norman. E. Phillips and R. H Clark, *Can. J. of Tech.* **29**, 349 (1951).