Identifying the quasi-particle contribution to the Nernst effect in La-based cuprates F. LALIBERTÉ, J. CHANG, N. DOIRON-LEYRAUD, O. CYR-CHOINIÈRE, D. LE BOEUF, R. DAOU, L. TAILLEFER, I. SHEIKIN, A. ANTUNES, L. MALONE, K. BEHNIA, C. PROUST, SHERBROOKE TEAM, GHMFL COLLABORATION — It has recently been shown that stripe order causes an enhanced normal-state Nernst effect ($\nu = N/B$) in Nd- and Eu-doped La$_{2-x}$Sr$_x$CuO$_4$ (LSCO) [1]. In magnetic fields up to $B = 10$ T, the normal-state Nernst effect was tracked down to $\sim 30$ K. Here we report on the Nernst effect in Nd-LSCO at $p = 0.20$ and Eu-LSCO at $p = 0.125$ in fields up to $B = 28$ T, where in both cases $T_C < 2$ K. In this field-induced normal state, the quasi-particle contribution to the Nernst effect dominates completely over the signal from superconducting fluctuations. We find that $\nu/T$ grows with decreasing temperature to reach a very sizable value as $T \to 0$.


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