## Abstract Submitted for the MAR10 Meeting of The American Physical Society

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<sub>2-x</sub>Sr<sub>x</sub>CuO<sub>4</sub> (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  $T \to 0$ .

[1] Cyr-Choinière et al., Nature, 458, 743–745 (2009).

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