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**Nernst signal generated by superconducting fluctuations in low-Tc disordered superconductors** A. POURRET, P. SPATHIS, H. AUBIN, K. BEHNIA, Laboratoire Photons et Matière (CNRS), ESPCI — In amorphous superconducting thin films of  $\text{Nb}_{0.15}\text{Si}_{0.85}$  [1][2] and  $\text{InOx}$  [3][4], a finite Nernst coefficient can be detected in a wide range of temperature and magnetic field. Due to the negligible contribution of normal quasi-particles, superconducting fluctuations easily dominate the Nernst response in the entire range of study. In the vicinity of the critical temperature and in the zero-field limit, the magnitude of the signal is in quantitative agreement with what is theoretically expected for the Gaussian fluctuations of the superconducting order parameter. Even at higher temperatures and finite magnetic field, the Nernst coefficient is set by the size of superconducting fluctuations. The Nernst coefficient emerges as a direct probe of the ghost critical field, the normal-state mirror of the upper critical field. Moreover, upon leaving the normal state with fluctuating Cooper pairs, we show that the temperature evolution of the Nernst coefficient is different whether the system enters a vortex solid, a vortex liquid or a phase-fluctuating superconducting regime. [1] A. Pourret *et al.*, Nature Physics 2, 683 - 686 (2006) [2] A. Pourret *et al.*, Phys. Rev. B. **76**, 214504 (2007) [3] P. Spathis *et al.*, Europhys. Lett. **83**, 57005 (2008) [4] A. Pourret *et al.*, New Journal of Physics **11**, 055071 (2009)

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