

Abstract Submitted  
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**Seebeck coefficient of underdoped LSCO in high magnetic fields : Fermi-surface reconstruction by charge-density-wave order** SVEN BADOUX, AREZOO AFSHAR, BASTIEN MICHON, ALEXANDRE OUELLET, SIMON FORTIER, NICOLAS DOIRON-LEYRAUD, LOUIS TAILLEFER, University of Sherbrooke, Sherbrooke, Canada, DAVID LEBOEUF, LNCMI, Grenoble, France, THOMAS CROFT, STEPHEN HAYDEN, University of Bristol, Bristol, UK, HIDENORI TAKAGI, University of Tokyo, Tokyo, Japan, KAZUYOSHI YAMADA, Tohoku University, Sendai, Japan, DAVID GRAF, NHMFL, Tallahassee, USA — The Seebeck coefficient  $S$  of the hole-doped cuprate  $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$  (LSCO) was measured in magnetic fields large enough to suppress superconductivity, for a range of Sr concentrations  $x$  in the underdoped regime. For  $x = 0.12, 0.125$  and  $0.13$ ,  $S/T$  is seen to drop upon cooling and become negative at low temperature. The same behavior is observed in the Hall coefficient  $R_{\text{H}}(T)$ . In analogy with other hole-doped cuprates at similar hole concentrations [1-4], the sign change in  $S$  and  $R_{\text{H}}$  shows that the Fermi surface of LSCO undergoes a reconstruction caused by the onset of charge-density-wave modulations. Such modulations have indeed been detected in LSCO by X-ray diffraction in precisely the same doping range [5].

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Sven Badoux  
University of Sherbrooke, Sherbrooke, Canada

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