HIGH-FIELD STUDIES OF CHARGE ORDER AND PSEUDOGAP IN YBCO

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I will present our recent measurements of the electric, thermal and thermo-electric coefficients of YBCO, performed in magnetic fields up to 35 T at the LNCMI in Grenoble, up to 45 T at the NHMFL in Tallahassee and up to 90 T at the LNCMI in Toulouse.

These shed new light on the nature of the charge-density-wave order and pseudogap critical point in YBCO.

This work was performed in collaboration with: Arezoo Afshar, Sven Badoux, Jordan Baglo, Douglas Bonn, Jérome Béard, Patrick Bourgeois-Hope, Olivier Cyr-Choinière, Nicolas Doiron-Leyraud, Sophie Dufour-Beauséjour, David Graf, Gaël Grissonnanche, Walter Hardy, Alexandre Juneau-Fecteau, Steffan Krämer, Francis Laliberté, David LeBoeuf, Ruixing Liang, Marcin Matusiak, Bastien Michon, Alexandre Ouellet, Cyril Proust, Brad Ramshaw, Alexis Riopel, Wojciech Tabis, Baptiste Vignolle, and David Vignolles.

SC: Superconductivity

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