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Anisotropic

interac-

tions in a Quantum Antiferromagnet Cs_2CuCl_4 as revealed by NMR. MARC-ANDRE VACHON, GEORGIOS KOUTROULAKIS, VESNA F. MITRO-VIC, Brown University, ARNEIL P. REYES, PHILIP L. KUHNS, NHMFL, RADU COLDEA, University of Bristol — We report nuclear magnetic resonance (NMR) measurements on the 2D frustrated quantum antiferromagnet Cs_2CuCl_4 . ¹³³Cs spectra at temperatures down to 60 mK and in external magnetic field up to 16 T are presented. We discuss the details of the destruction of the 3D long range ordered phases in this compound. The effects of temperature and the applied field are contrasted, that is, the details of the nature of the phase transition will be discussed. Furthermore, we will address the influence of anisotropic interactions on these phase transitions.

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