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Quantum criticality in an itinerant antiferromagnet RAFAEL JARAMILLO, Harvard University, YEJUN FENG, Argonne National Laboratory, JIYANG WANG, THOMAS ROSENBAUM, The University of Chicago — Recent x-ray diffraction measurements have revealed a pressure-tuned continuous quantum phase transition in antiferromagnetic Cr [1]. High pressure transport results expose a crossover to a narrow fluctuation-dominated quantum critical regime at high pressure and low temperature. The discovery and description of a continuous quantum critical regime in this pure model system has broad implications for studies of quantum criticality and marginally magnetic materials.

[1] R. Jaramillo, Yejun Feng *et al.* Nature **459**, 405 (2009).

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