Abstract Submitted for the MAR10 Meeting of The American Physical Society

Low Temperature Local Structure of Multierroic of ReMn₂O₅¹ PENG GAO, A. MASADEH, T.A. TYSON, Department of Physics, New Jersey Institute of Technology, Newark 07102, TH. PROFFEN, Lujan Neutron Scattering Center, Los Alamos, NM 87545, S. GOCHE, S.-W. CHEONG, Department of Physics and Astronomy & Rutgers Center for Emergent Materials, Rutgers University, Piscataway, NJ 08854 — The temperature dependent structure of the REMn₂O₅ (REe=rare earth) system has been examined by the Neutron and X-ray pair distribution function method based on high-q data. Comparisons with Rietveld and XAFS measurements will be made. The detailed temperature dependent structure on multiple length scales will be presented.

¹This work is supported by DOE Grant DE-FG02-07ER46402.

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Date submitted: 29 Nov 2009 Electronic form version 1.4