

Abstract Submitted  
for the MAR12 Meeting of  
The American Physical Society

**SANS Mapping of Orientation and Relaxation of Polymer Chains upon Uniaxial Extension**<sup>1</sup> HOWARD WANG, LIWEI HUANG, Institute for Material Research and Department of Mechanical Engineering, State University of New York, Binghamton, NY 13902, YANGYANG WANG, Department of Chemistry, University of Tennessee, Knoxville, TN 37996, HAO SUN, SHI-QING WANG, Department of Polymer Science, University of Akron, Akron, Ohio 44325, DAZHI LIU, CARRIE GAO, KE AN, Spallation Neutron Source, Oak Ridge National Laboratory, Oak Ridge, Tennessee 37831 — Small angle neutron scattering (SANS) has been used to measure entangled chains in polymer melts upon uniaxial stretching. The degree of anisotropy and the coil dimension are discussed in the light of the applicability of the tube model.

<sup>1</sup>Supported by NSF CMMI and DMR

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Date submitted: 12 Dec 2011

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