Abstract Submitted for the MAR12 Meeting of The American Physical Society

Probing the liquid behavior in La-based metallic glasses using NMR spectroscopy MAGDALENA SANDOR, University of North Carolina, WEI XU, Huazhong University of Science and Technology, HAI-BO KE, XUE-KUI XI, Chinese Academy of Sciences, YUE WU, University of North Carolina, WEI-HUA WANG, Chinese Academy of Sciences — The nature of liquid structure and its temperature and/or pressure dependent behavior is currently an active area of scientific investigation. Temperature dependent ²⁷Al nuclear magnetic resonance (NMR) experiments were carried out above the liquid temperature in La-based metallic glasses. The strong coexistence of two liquid states was observed in addition to nonlinear liquid behavior. NMR results also provide thermodynamic insight for the structural changes observed.

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Date submitted: 19 Nov 2011 Electronic form version 1.4