Spin excitation in LiFeAs\textsuperscript{1} MENG WANG, HUIQIAN LUO, XI-ANCHENG WANG, Institute of Physics Chinese Academy of Sciences, YANG ZHAO, JEFFREY LYNN, NIST Center for Neutron Research, CHANGQING JIN, Institute of Physics Chinese Academy of Sciences, PENGCHENG DAI, University of Tennessee, PENGCHENG DAI TEAM, CHANGQING JIN COLLABORATION, JEFFREY LYNN COLLABORATION — We used inelastic neutron scattering to study the spin excitations in LiFeAs. Clear spin excitations were found but there was no spin resonance. Surprisingly, very big spin gap exists in this material.

\textsuperscript{1}Institute of Physics Chinese Academy of Sciences

Meng Wang

Institute of Physics Chinese Academy of Sciences

Date submitted: 17 Nov 2010