Abstract Submitted for the MAR17 Meeting of The American Physical Society

Fluctuating charge density wave (CDW) in quasi-one-dimensional conductor Rb_{0.3}MoO₃¹ GUOQING WU, JUN DONG, YAFANG XU, XIAO-SHAN YE, XIANGHUA ZENG, Yangzhou University, BING WU, Fayetteville State University, W. GILBERT CLARK, University of California, Los Angeles (UCLA) — Fluctuating charge density wave (CDW) in quasi-one-dimensional conductor Rb_{0.3}MoO₃ Guoqing Wu, Jun Dong, Yafang Xu, Xiao-shan Ye, Xianghua Zeng*, Yangzhou University Bing Wu, Fayetteville State University W. G. Clark, University of California, Los Angeles Various forms of charge and spin ordering exhibit in low dimensional conductors. They accompany with macroscopic coherence like superconductivity in some cases and sometimes compete or coexist with each other, while their significance is not fully understood. The quasi-one-dimensional blue bronze Rb_{0.3}MoO₃ is known to be a charge density wave (CDW) conductor and has been widely studied. Here we report spin-phase relaxation rate $(1/T_2)$ measurements by 87 Rb-NMR with a variation of field (B) alignments over the temperature rage 80 250 K ((B = 9 T)). There is no clear evidence to support the model presented earlier in which the slow fluctuation of phasons are observed in the thermal fluctuations of CDW. *Supported by China NSF grant: 61474096

¹Supported by China NSF grant: 61474096

Guoqing Wu Yangzhou University

Date submitted: 11 Nov 2016 Electronic form version 1.4