

Abstract Submitted  
for the MAR09 Meeting of  
The American Physical Society

**Fermi surface of the parent compound of iron-based superconductor** T. SHIMOJIMA, ISSP U. Tokyo, Y. ISHIDA, RIKEN SPring-8, N. KATAYAMA, K. OHGUSHI, K. ISHIZAKA, T. KISS, M. OKAWA, ISSP U. Tokyo, T. TOGASHI, RIKEN SPring-8, X.-Y. WANG, C.-T. CHEN, CAS, S. WATANABE, ISSP U. Tokyo, T. OGUCHI, U. Hiroshima, S. SHIN, ISSP U. Tokyo — Fermi surface of the parent compound of iron-based superconductor BaFe<sub>2</sub>As<sub>2</sub> is studied by angle-resolved photoemission spectroscopy using VUV-laser. This compound shows structural and magnetic phase transition around  $T_N = 140$  K [1]. We found the transformation of Fermi surface across  $T_N$ . We will discuss its origin comparing with the first principle band calculation.

[1] M. Rotter et al., Phys. Rev B 78, 020503 (2008).

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Date submitted: 31 Dec 2008

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