

Abstract Submitted
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New Fermi Surface Sheets Revealed in Sr₂RuO₄ Revealed by High Resolution Angle-Resolved Photoemission Spectroscopy SHANYU LIU, WENTAO ZHANG, LIN ZHAO, HAIYUN LIU, XIAOWEN JIA, DAIXIANG MU, GUODONG LIU, XIAOLI DONG, JUN ZHANG, XIAOYANG WANG, QINJUN PENG, ZHIMIN WANG, SHENJIN ZHANG, FENG YANG, Z. Q. MAO, CHUANGTIAN CHEN, ZUYAN XU, X. J. ZHOU, NATIONAL LABORATORY FOR SUPERCONDUCTIVITY, BEIJING NATIONAL LABORATORY FOR CONDENSED MATTER PHYSICS, TEAM¹, TECHNICAL INSTITUTE OF PHYSICS AND CHEMISTRY, CHINESE ACADEMY OF SCIENCES, BEIJING 100190, CHINA COLLABORATION, DEPARTMENT OF PHYSICS, TULANE UNIVERSITY, NEW ORLEANS, LOUISIANA 70118, USA COLLABORATION — We will present our detailed Fermi surface measurements on Sr₂RuO₄ by high resolution angle-resolved photoemission spectroscopy (ARPES) including vacuum ultra-violet (VUV) laser-based ARPES. In addition to the three sets of Fermi surface sheets originating from the bulk bands, the surface bands and the shadow bands of the surface bands, we have revealed two new Fermi surface sheets. The origin of these new Fermi surface sheets will be discussed.

¹Institute of Physics, Chinese Academy of Sciences, Beijing 100190, China

Shanyu Liu

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