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Electronic Structure of ZrTe₃ from Angle-Resolved Photoemission Spectroscopy SHOUPENG LYU, LI YU, JIANWEI HUANG, YUXIAO ZHANG, CHENG HU, YING DING, CONG LI, GUDONG LIU, LIN ZHAO, Beijing National Laboratory for Condensed Matter Physics, Chinese Academy of Sciences, CHENGTIAN LIN, Max Planck Institute for Solid State Research, CHUANGTIAN CHEN, ZUYAN XU, Technical Institute of Physics and Chemistry, Chinese Academy of Sciences, XINGJIANG ZHOU, Beijing National Laboratory for Condensed Matter Physics, Chinese Academy of Sciences, TECHNICAL INSTITUTE OF PHYSICS AND CHEMISTRY, CHINESE ACADEMY OF SCIENCES COLLABORATION, MAX PLANCK INSTITUTE FOR SOLID STATE RESEARCH COLLABORATION, INSTITUTE OF PHYSICS, CHINESE ACADEMY OF SCIENCES COLLABORATION — ZrTe₃ has both quasi-one dimensional and quasi-two-dimensional structural components in its crystal structure. It shows not only charge density wave (CDW), but also deserves studying the coexistence or competition between different broken-symmetry ground states. In this talk, we will present electronic study on ZrTe₃ by angle-resolved Time-of-Flight electron analyzer that can cover two-dimensional momentum space simultaneously with high energy ($\sim 1\text{meV}$) and momentum resolution, Bilayer splitting feature is clearly resolved and its momentum and temperature dependence is investigated. We will discuss on the CDW ground state and the normal state quasi-particle formation in ZrTe₃ based on our measurements.

Shoupeng LYU
Chinese Academy of Sciences (CAS)

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