

Abstract Submitted
for the MAR17 Meeting of
The American Physical Society

Laser-ARPES Study on Superconducting gap, Pseudogap and Quasiparticle scattering rate of Bi2201 Superconductors XUAN SUN, CHENG HU, YING DING, YINGYING PENG, LI YU, LIN ZHAO, GUODONG LIU, Chinese Academy of Sciences (CAS), CHUANGTIAN CHEN, ZUYAN XU, Technical Institute of Physics and Chemistry, XINGJIANG ZHOU, Chinese Academy of Sciences (CAS), ZHOU TEAM, CHEN COLLABORATION — The nature of the anomalous normal state properties has been a long-standing puzzle in high temperature cuprate superconductors. Here we will present our laser-based angle-resolved photoemission spectroscopy (ARPES) results on underdoped and optimally doped Bi₂(Sr,La)₂CuO₆ (Bi2201) superconductor. Taking advantage of the high resolution of Laser-ARPES, we have carried out systematic investigation on the superconducting gap, pseudogap, and scattering rate as a function of momentum and temperature for La-Bi2201 for Bi2201 samples with different doping levels. The implications of these results on the understanding of the normal state will be discussed

Xuan Sun
Chinese Academy of Sciences (CAS)

Date submitted: 17 Jan 2017

Electronic form version 1.4