Abstract Submitted
for the MAR08 Meeting of
The American Physical Society

Magnetic-field effect on the quasiparticle excitation observed by the tunneling spectroscopy in $Bi_2Sr_2CaCu_2O_{8+\delta}$ single crystal[1] YI XUAN, Texas Center for Superconductivity at the University of Houston, H.J. TAO, Z.Z. LI, B.R. ZHAO, Z.X. ZHAO, National Laboratory for Superconductivity, Institute of Physics and Center for Condensed Mater Physics, Chinese Academy of Sciences, China — In the *d*-wave superconductor, due to the existence of nodes of the pairing gap, the field-dependence of the quasiparticle density of state has been predicted to be essentially different from the behavior in the *s*-wave case [1]. Here we report the planar junction tunneling spectra at different magnetic fields in the high-T_c superconductor $Bi_2Sr_2CaCu_2O_{8+\delta}$ to study how the field modifies the quasiparticle excitation. [1] G. E. Volovik, JETP Lett. **58**, 469 (1993).

[1]This research has been supported by the National natural Science Foundation of China under Grant No. 19974070.

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Date submitted: 05 Dec 2007 Electronic form version 1.4