

Abstract Submitted
for the MAR05 Meeting of
The American Physical Society

Fine Details of the Electronic Excitations in the Near-Nodal Region of the Fermi Surface in Bi 2212 T. VALLA, T.E. KIDD, J. RAMEAU, P.D. JOHNSON, G.D. GU, Brookhaven National Lab — Recent high resolution ARPES experiments on high quality $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_{8+\delta}$ samples have uncovered extremely coherent excitations in the near-nodal region of the Fermi surface. The width of these excitations at low energies and at low temperature seems to be essentially resolution limited. This observation has enabled a more detailed insight into the intrinsic properties of these excitations. Some of the “fine features” that have not been previously resolved, will be discussed. This work was supported by the DOE under contract number DE- AC02-98CH10886.

T. Valla
Brookhaven National Laboratory

Date submitted: 11 Jan 2005

Electronic form version 1.4