Abstract Submitted
for the MAR14 Meeting of
The American Physical Society

Mott physics revealed in high temperature superconductors by resonant inelastic X-ray scattering experiments TING-KUO LEE, Academia Sinica, CHENG-JU LIN, Caltech — In recent resonant inelastic X-ray scattering (RIXS) experiments, energy dispersions of measured spin-wave or paramagnon excitations of cuprates show no signs of softening up to 40% hole doping or substantially hardening after only 15% electron doping. In this talk the anomalous result is explained by a simple explanation based one the t-J model. It reveals the presence of the strong correlation of Mott physics in highly doped cuprates. Some predictions will be also presented.

Ting-Kuo Lee
Academia Sinica

Date submitted: 12 Nov 2013 Electronic form version 1.4