## Abstract Submitted for the MAR08 Meeting of The American Physical Society

Systematic ARPES study on Na-rich Na $_x$ CoO $_2$  (0.75<x<1) Y.-M XU, Boston College, P. RICHARD, M. NEUPANE, F.-C. CHOU, C.-T. LIN, M. GAO, Z. WANG, H. DING — The phase diagram of the cobaltite Na $_x$ CoO $_2$ , with varying Na concentration x, is very rich and complicated. At the high-doping regime (x>0.75), the system was found to be more correlated, with a spin-density-wave state emerging at low temperatures. A stable phase was found with  $\sqrt{13} \times \sqrt{13}$  symmetrical superstructure at Na-rich doping cobaltite. We will report our recent ARPES results of the Na-rich Na $_x$ CoO $_2$  (0.75<x<1) samples.

 $\begin{array}{c} {\rm Yiming} \ {\rm Xu} \\ {\rm Boston} \ {\rm College} \end{array}$ 

Date submitted: 27 Nov 2007 Electronic form version 1.4