Abstract Submitted
for the MAR08 Meeting of
The American Physical Society

Energy bands of multilayer graphenes WEN-YING RUAN, JIA-AN YAN, MEI-YIN CHOU, School of Physics, Georgia Institute of Technology — The energy bands of L-layer graphenes have been obtained using first-principles calculations. We found that after the introduction of interlay coupling the linear valence and conduction bands of isolated layers can either remain or develop into parabolic bands or bands with a very flat top(bottom), depending on the stacking geometry. A theoretical explanation and some general rules have been developed based upon the tight-binding model with only the nearest-neighbor interactions.

Wen-Ying Ruan
School of Physics, Georgia Institute of Technology

Date submitted: 20 Nov 2007 Electronic form version 1.4