Abstract Submitted for the MAR07 Meeting of The American Physical Society

Carbon Nanotubes as Nucleobase Sensors LEIF POORMAN, University of California, Santa Cruz — We compute the conductance change of a carbon nanotube when one nucleobase is adsorbed. Different bases cause similar, but potentially distinguishable, conductance changes. We discuss possible applications of this effect in DNA sequencing.

Leif Poorman University of California, Santa Cruz

Date submitted: 29 Dec 2006 Electronic form version 1.4