Abstract Submitted for the APR09 Meeting of The American Physical Society

Study of $B \to \pi \ell \nu$ and $B \to \rho \ell \nu$ Decays and Determination of $|V_{ub}|$ H. WELLS WULSIN, SLAC, BABAR COLLABORATION — We present an analysis of exclusive charmless semileptonic B- meson decays based on 343 million $B\bar{B}$ pairs recorded with the BABAR detector at the $\Upsilon(4S)$ resonance. We measure branching fractions $\mathcal{B}(B\to \pi \ell \nu)$ and $\mathcal{B}(B\to \rho \ell \nu)$. We compare the measured distribution in q^2 , the momentum- transfer squared, with theoretical predictions for the form factors from lattice QCD, light-cone sum rules, and quark model calculations. We also extract the CKM matrix element $|V_{ub}|$ from the measurement of $B\to \pi \ell \nu$ decays.

J. Michael Roney Univ. of Victoria

Date submitted: 08 Jan 2009 Electronic form version 1.4