

Abstract Submitted  
for the APR08 Meeting of  
The American Physical Society

**Measurements of Partial Branching Fractions for  $\bar{B} \rightarrow X_u \ell \bar{\nu}$  and Determination of  $|V_{ub}|$  at BaBar** MICHAEL SIGAMANI, Queen Mary, University of London, BABAR COLLABORATION — We present partial branching fractions for inclusive charmless semileptonic  $B$  decays  $\bar{B} \rightarrow X_u \ell \bar{\nu}$ , and the determination of the CKM matrix element  $|V_{ub}|$ . The analysis is based on a sample of 383 million  $\Upsilon(4S)$  decays into  $B\bar{B}$  pairs collected with the BaBar detector at the PEP-II  $e^+e^-$  storage rings.  $\Upsilon(4S) \rightarrow B\bar{B}$  events are tagged by the full reconstruction of a hadronic decay of one of the  $B$  mesons. Signal  $\bar{B} \rightarrow X_u \ell \bar{\nu}$  is then identified looking at several kinematic variables. The corresponding value of  $|V_{ub}|$  is extracted.

Owen Long  
University of California Riverside

Date submitted: 11 Jan 2008

Electronic form version 1.4