

Abstract Submitted
for the APR05 Meeting of
The American Physical Society

Study of $B \rightarrow X_u \ell \nu$ Decays on the Recoil of Fully Reconstructed B Mesons with the BaBar Experiment WOLFGANG MENGES, Queen Mary, University of London, BABAR COLLABORATION — We present a study of charmless semileptonic B decays performed on the recoil of B candidates fully reconstructed in hadronic decay modes. The semileptonic decays of the second B meson are identified by the presence of an electron or a muon. The hadronic invariant mass, m_X , and the mass of the lepton pair, q^2 are used to discriminate charmless B decays from charmed background. From this event sample the inclusive semileptonic branching fraction for charged and neutral B mesons for $B \rightarrow X_u \ell \nu$ is measured and the CKM matrix element $|V_{ub}|$ is extracted. In addition, the unfolding of the hadronic mass spectrum and the measurement of several exclusive charmless semileptonic decays is discussed.

Christopher Hearty
University of British Columbia

Date submitted: 07 Jan 2005

Electronic form version 1.4