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## Measurements of Semileptonic B mesons decays to Charm and the Determination of the CKM element $|V_{cb}|$ at BABAR

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We present a set of measurements of semileptonic B meson decays to charm using the BABAR data set collected at the SLAC  $e^+e^-$  B-factory operating on the Upsilon(4S) resonance. This paper includes: a report on the observation of the  $B \rightarrow D_s K l \nu$  decay mode the knowledge of which provides input to the “ $1/2$  vs  $3/2$  puzzle” of semileptonic B decays into broad  $D^{**}$  states, where there is disagreement between theoretical predictions and experimental results; a search for  $B \rightarrow \Lambda_c X l \nu$  decays in events tagged by a fully reconstructed B Meson; a measurement of the Cabibbo-Kobayashi-Maskawa matrix element  $|V_{cb}|$  and the form-factor slope  $\rho^2$  in  $B \rightarrow D l \nu$  decays in events tagged by a fully reconstructed B meson; and measurements of the moments of observed spectra in inclusive semileptonic B-meson decays to charm hadrons  $B \rightarrow X c l \nu$  which are used for the extraction of the total decay fraction,  $|V_{cb}|$ , the b- and c-quark masses, and four heavy-quark QCD parameters in the framework of a Heavy Quark Expansion.

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