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Model-independent Extraction of Form Factors and |V_{cb}| in B ->D l nu with hadronic tagging at BABAR

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BABAR performed the first two-dimensional unbinned angular analysis of the semileptonic decay $\bar{B} \to D\ell^-\bar{\nu}_\ell$ with the full data set, where ℓ is either an electron or a muon. The other B meson is tagged via hadronic reconstruction. A novel data-driven signal-background separation procedure with minimal dependence on simulation has been developed that preserves all multi-dimensional correlations present in the data. Including input from recent lattice QCD calculations and previously available experimental data, we present a model-independent form factor analysis and the extraction of the CKM matrix element $|V_{cb}|$.

Author: Prof. EIGEN, Gerald (University of Goettingen/Caltech)

Presenter: Prof. EIGEN, Gerald (University of Goettingen/Caltech)

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