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Model-independent extraction of form-factors and $|V_{cb}|$ in $\overline{B} \rightarrow D\ell^-\overline{\nu}_\ell$ with hadronic tagging at *BABAR*

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Employing the full *BABAR* dataset, the first two-dimensional unbinned angular analysis of the semileptonic decay $\overline{B} \rightarrow D\ell^-\overline{\nu}_\ell$ is performed in both q^2 and lepton helicity angle, making use of the hadronic reconstruction of the tag-side *B* meson. Here ℓ stands for an electron or a muon. A novel data-driven signal-background separation procedure with minimal dependence on simulation is developed, that preserves all multi-dimensional correlations present in the data.

Including input from latest lattice QCD and previously available experimental data, the underlying form-factors are extracted in both model-dependent and independent methods. The CKM matrix element $|V_{cb}|$ and the SM prediction of the lepton-flavor universality violation variable $R(D)$ are extracted.

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