A Study of the Charmed Semileptonic Decays $D^0 \to K^{\pm} e\nu$, $D^0 \to \pi^{\pm} e\nu$, $D^\pm \to K^0 e\nu$ and $D^\pm \to \pi^0 e\nu$

NADIA ADAM, Cornell University, CLEO COLLABORATION — Using a sample of 1.8 million $D\bar{D}$ mesons collected at the $\psi(3770)$ with the CLEO detector, and a reconstruction method based on the full event hermeticity, we measure branching fractions and branching fraction ratios for the four exclusive semileptonic decay modes $D^0 \to K^{\pm} e\nu$, $D^0 \to \pi^{\pm} e\nu$, $D^\pm \to K^0 e\nu$ and $D^\pm \to \pi^0 e\nu$. Form factors are measured using a fit to the branching fraction results in five $q^2$ bins. Three form factor models are explored, the simple pole model, the modified pole model and a series parameterization model. In addition we fit for the CKM matrix element $|V_{cs}|$ and the ratio $|V_{cd}|/|V_{cs}|$. 

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