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Semileptonic D Meson Decays from CLEO-c

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Using the full CLEO-c $D^0D^0\bar{0}$, D^+D^- , and $D_s\bar{D}_s$ data samples, we have made precision measurements of many D meson semileptonic branching fractions and form factors. The results for the form factors of exclusive D^+ and D^0 semileptonic decays to K and π mesons agree well with recent Lattice QCD calculations. Using a non-parametric technique, we measure the form factor for $D^{+-}\rightarrow K^0\bar{0} e^+ \nu_e$ decay and also the mass-suppressed form factor in $D^{+-}\rightarrow K^0\bar{0} \mu^+ \nu_\mu$ decay. We report new results for the Cabibbo-suppressed semileptonic decays to the vector mesons, $D^0\rightarrow\rho^- e^+ \nu_e$, $D^{+-}\rightarrow\rho^0 e^+ \nu_e$, and $D^{+-}\rightarrow\omega e^+ \nu_e$, as well as to the scalars η and η' . We also report measurements of exclusive D_s semileptonic decays to a variety of final states. Finally, we report precision measurements of inclusive D^0 , D^+ , and D_s semileptonic decays.

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