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Recent results on charmed meson decays at BESIII

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The BESIII experiment at BEPCII accumulated the world's largest e^+e^- collision samples at 3.773 and 4.178 GeV. In (semi-)leptonic decay aspect, we have studied the purely leptonic decays $D^+ \rightarrow \tau^+\nu$ and $D_{S^+} \rightarrow \mu^+\nu$, and the semi-leptonic decays of D^0 to $K(\pi)^-\mu^+\nu$, $D^+ \rightarrow \pi^0\mu^+\nu$, $D^+(\underline{S}) \rightarrow \eta(\prime)\nu$ and $D_{S^+} \rightarrow K^*(\prime)\nu$. We will report the improved measurements of the branching fractions of these decays and the CKM matrix elements $|V_{cs(d)}|$, the $D(s)^+$ decay constants, the form factors of $D(s)$ semi-leptonic decays. In hadronic decay aspect, we will report the measurements of the branching fractions of $D^0(+) \rightarrow PP$ ($P=Peudecalor$) decays, the observations of baryonic decay $Ds^+ \rightarrow p\bar{n}$, the pure W -annihilation decay $Ds^+ \rightarrow \omega\pi^+$ and s cs decay $Ds^+ \rightarrow \omega K^+$. In rare decay aspect, we will report the upper limit of branching fractions of radiative decay $D^+ \rightarrow \gamma e^+\nu$, c quark unchanged decay $D^+ \rightarrow D^0e^+\nu$ and FCNC process $D \rightarrow h(h')e^+e^-$.

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