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Charmed meson decays at BESIII

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BESIII has collected 2.93 and 7.33 fb^-1 of e+e- collision data samples at 3.773 and 4.128-4.226 GeV, which provide the largest dataset of DDbar and DsDs pairs in the world, respectively.

In this talk, we will report the updated measurements of |Vcs| in Ds+->tau+ nu and the form factor studies in Ds+->K+K- e+ nu and pi+pi- e+ nu. In addition, we will report the most updated amplitude analyses of Cabibbo-favored and -suppressed Ds decays at BESIII, including the observation of a new a0-like state at 1.817 GeV, the branching fraction measurements of D mesons decay involving KL0 and multiple kaons/pions, and the doubly Cabibbo-suppressed decay D0 ⟶K+pi-pi0. We will also report the improved measurement of the strong-phase difference in quantum-correlated DD decays. Finally, we will introduce prospect on measurements of charmed meson hadronic decays with the coming 20 fb-1 at 3.773 GeV data collected by BESIII.

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Classifica Sessioni: Hadron decays, production and interaction

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