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Scalars in charmed meson decays

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The nontrivial quark structure of light scalar mesons $f_0(500)$, $f_0(980)$ and $a_0(980)$ remains controversial for many years. In passed years, BESIII studied them via several semileptonic D decays ($D^0 \rightarrow a_0(980)^- e^+ \nu$, $D^+ \rightarrow a_0(980)^0 e^+ \nu$, $D_s^+ \rightarrow a_0(980)^0 e^+ \nu$, $D^+ \rightarrow f_0(500) f_0(980) e^+ \nu$, $D^+ \rightarrow f_0(500) \mu^+ \nu$, $D_s^+ \rightarrow f_0(500) f_0(980) e^+ \nu$). Especially, the measurement of $D \rightarrow f_0/a_0$ form factor could shed light on the nature of them. In this talk, I will review all studies about light scalar mesons via semileptonic D decays at BESIII. A short outlook would be given based on BESIII new data in the future.

session

B. Hadron Spectroscopy

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