

# XVth Quark Confinement and the Hadron Spectrum



Contribution ID: 35

Type: Oral

## Light scalar mesons in semileptonic decay of charm meson at BESIII

*Monday 19 August 2024 16:00 (20 minutes)*

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 has collected 8.0 and 7.33  $\text{fb}^{-1}$  of  $e^+e^-$  collision data samples at 3.773 and 4.178-4.226 GeV, respectively. In this talk, we will review all the studies about light scalar mesons via semileptonic D decays at BESIII. These studies includes the decays  $D^0 \rightarrow a_0(980)^- e^+ \nu$ ,  $D^+ \rightarrow a_0(980)^0 e^+ \nu$ ,  $D_s^+ \rightarrow a_0(980)^0 e^+ \nu$ ,  $D^+ \rightarrow f_0(500) l^+ \nu$ ,  $D^+ \rightarrow f_0(980) e^+ \nu$ , and  $D_s^+ \rightarrow f_0(500)/f_0(980) e^+ \nu$ . A short outlook would be given based on BESIII new data in the future.

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**Session Classification:** Light Quarks

**Track Classification:** B: Light Quarks