Contribution ID: **1255** Type: **Talk**

$f_1(1285) \to e^+e^-$ decay and direct f_1 production in e^+e^- collisions

Tuesday 22 August 2017 15:00 (20 minutes)

The width of $f_1(1285) \to e^+e^-$ decay is calculated in the vector meson dominance model. The result depends on the relative phase between two coupling constants describing $f_1 \to \rho^0\gamma$ decay. The $\Gamma(f_1 \to e^+e^-)$ is estimated to be $\simeq 0.07 \div 0.19$ eV. Direct f_1 production in e^+e^- collisions is discussed, and the $e^+e^- \to f_1 \to a_0\pi \to \eta\pi\pi$ cross section is calculated. Charge asymmetry in the $e^+e^- \to \eta\pi^+\pi^-$ reaction due to interference between the $e^+e^- \to f_1$ and $e^+e^- \to \eta\rho^0$ amplitudes is studied.

Topic:

Topic: High Energy Particle Physics

Summary

Primary author: RUDENKO, Alexander (Novosibirsk State University)

Presenter: RUDENKO, Alexander (Novosibirsk State University)

Session Classification: Parallel session

Track Classification: A High Energy Particle Physics: