

1/Nc corrections to the processes of $\pi\pi$ production in $e+e-$ annihilation and τ decay

It is shown that the processes $e+e-\rightarrow\pi+\pi-$ and $\tau\rightarrow\pi\pi\nu$ can be described in a unified approach in satisfactory agreement with experiment using the vector coupling constant $g=6$. In this case, in addition to quark loops, it is also necessary to take into account meson loops corresponding to the next order in $1/N_c$. These loops must be taken into account when describing the $\gamma(W)\rightarrow\rho$ transition, as well as in interaction of mesons in the final state.

Section

Nuclear physics (Section 1)

Primary author: NURLAN, Kanat (BLTP, JINR)

Co-authors: Dr VOLKOV, Mikhail (BLTP, JINR); Dr PIVOVAROV, Aleksey (BLTP, JINR)

Presenter: NURLAN, Kanat (BLTP, JINR)

Track Classification: The V International Scientific Forum “Nuclear Science and Technologies”: Nuclear physics (Section 1)