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The study of the nonleptonic decay \bm{$\Xi_c^0 \to \Lambda_c^+ \pi^-$} in the covariant confined quark model

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The nonleptonic decay $\Xi_c^0 \to \Lambda_c^+ \pi^-$ with $\Delta C = 0$
is systematically studied in the framework of the covariant confined quark
model (CCQM) with account for both short and long distance effects.
The short distance effects are induced by four topologies of external and
internal weak $W^\pm$ exchange, while long distance effects are saturated
by an inclusion of the so-called pole diagrams with an intermediate
$\frac{1}{2}^+$ and $\frac{1}{2}^-$ baryon resonances. The contributions from
$\frac{1}{2}^+$~resonances are calculated straightforwardly by account
for single charmed Σ_c^0 and $\Xi_c'^+$~baryons whereas the
contributions from $\frac{1}{2}^-$~resonances are calculated by using
the well-known soft-pion theorem in the current-algebra approach.
It allows to express the parity-violating S-wave amplitude in terms
of parity-conserving matrix elements. It is found that the contribution
of external and internal W-exchange diagrams is significantly suppressed
by more than one order of magnitude in comparison with data.
The pole diagrams play the major role to get consistency with experiment.

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