



Contribution ID : 55

Type : **not specified**

$D^+ \rightarrow K^- p^+ p^+$ and the elastic $K p$ amplitude

Monday, 6 October 2008 17:00 (0:30)

Abstract content

Heavy-meson decays are important sources of information about scalar resonances. Hopefully, they may also shed light into meson-meson scattering amplitudes. In a recent work, our group has studied the low-energy sector of the reaction $D^+ \rightarrow K^- p^+ p^+$ by means of chiral $SU(3) \times SU(3)$ effective lagrangians, which include scalar resonances and allow a consistent treatment of the primary weak vertex. In the framework of the quasi two-body approximation, the decay amplitude involves a non-resonant background superimposed to processes in which the outgoing mesons interact before reaching the detector. As $p^+ p^+$ scattering can be safely neglected in this problem, final state interactions involve just the elastic $K p$ amplitude. We discuss whether and how information about $K p$ scattering at low energies can be extracted from D^+ decays.

Summary

Primary author(s) : Dr. ROBILOTTA, Manoel Roberto (Sao Paulo U.)

Presenter(s) : Dr. ROBILOTTA, Manoel Roberto (Sao Paulo U.)

Session Classification : Hadronic Physics