Subject: Re: Delta from Krivoruchenko
Posted by Malgorzata Gumberidze on Thu, 20 Oct 2011 07:17:40 GMT

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I have made similar studies for the pp@2.2.

For the pluto cocktail which is included into the
draft of the publication we were using pluto version v5.36
and PDecayManager. In the plot below you can see mass
dependent branching ratio for the Delta+ in channel
pp->pD+.

the color meaning is following:

 Pluto v5_36 with DecayManager, not working Krivoruchenko, no flat generator

PLEASE notice that there is mistake in the label in plot, it is v5.36 and not v5.26

Pluto v5_38.2 with PReaction and all flags switch on:

makeDistributionManager()->Exec("elementary");
makeDistributionManager()->Exec("dalitz_mod: krivoruchenko");
makeDistributionManager()->Exec("dalitz_mod:static_br_thresh=0.100 ; flat_generator");

In case of the BLACK normalization comes for free using weights. RED curve is normalize in a
way that at pole this ration is 4.15e-5.

mass dependance of the BR in both calculations are very similar.
That means if the DecayManager spectra are scaled such that average BR is 5.9e-5 (as obtain
with the recommnded procedure from the Forum) then the resulting Delta contribution to the
dilepton mass spectrum should be fine.

same investigation for the rho0 will follow

gosia

File Attachments
1) BD_massDp_old_newPluto.gif, downloaded 824 times

The figure shows a plot with y-axis labeled BR_{Δ^+} (×10⁻³, scaled by $\times 10^{-3}$) ranging from 0 to 0.7, and x-axis labeled M_{Δ^+} ranging from 1 to 1.6. Legend text: **pluto v5.26, DecayManager** (red) and **pluto v5.38.2, PReaction** (black).