
Subject: Re: Multipion with Event Mixing

Posted by [Elisa Fioravanti](#) on Mon, 12 Dec 2011 09:45:18 GMT

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Hello everybody,

here you can find the results also of $\pi^+\pi^-\pi^+\pi^-$ with event mixing.

I reported both $\pi^+\pi^-$ and $2(\pi^+\pi^-)$ channel.

As you can see in slide number 11, for the invariant mass of the four pions, the background level is huge, and so I think that one solution could be to fit the distribution with a gaussian function plus a polynomial function in order to take into account the background level.

In this way I calculated the efficiency as number of signal events/ number of generated events, and the result is 13% against 30% without event mixing.

For the two pions channel we have a drop in efficiency from 69% to 60%.

Elisa

[File Attachments](#)

1) [Multipion12december.pdf](#), downloaded 436 times
