Subject: Re: Problems with PndKinFitter::AddMassConstraint
Posted by StefanoSpataro on Wed, 07 May 2014 15:32:57 GMT

View Forum Message <> Reply to Message

This is a mass constraint fit, you force the total mass being a defined value, and then you use the modified parameters to check other distributions (i.e. you fit the j/psi mass and check the improvement in the resolution of psi mass). The mass must be a delta, or must have sigma much narrower than resolution... in this case you have only one moderate improvement. The 4C fitter works nicely and you have a delta there, or better a very narrow distribution. A broader distribution means that the fit did not converge to a global minimum, and I am not surprised seeing that chi2 distribution.

The main question is: why the chi2 distribution is screwed? Once fixing this, I believe the fitter will produce good results. The fact that the 4C fitters works nicely, in both full and fast sim, means that covariances are fine.