Subject: CBM cockails
Posted by Tetyana Galatyuk on Mon, 01 Jul 2013 09:44:03 GMT
View Forum Message <> Reply to Message

Dear all,

enclosed please find below link to the short reports about the CBM cocktail generation:
* Low- and intermediate mass :
http://cbm-wiki.gsi.de/cgi-bin/viewfileauth/LowMass/CbmDileptons130621?f
ilename=2013_06_20_HadronicCocktails.pdf
* J/psi : http://cbm-wiki.gsi.de/pub/LowMass/CbmDileptons130621/ppbhaduri_dilepton
meet_june21st2013.pdf

Action items:
- fix rapidity width for J/psi (Partha)
- ccbar contribution?
- "Heavy quarkonium: progress, puzzles, and opportunities", Eur. Phys. J. C (2011) 71: 1534, DOI 10.1140/epjc/s10052-010-1534-9 - additional input for the J/psi simulations

your comments and questions are welcome.

Yours,
Tetyana

Subject: Re: CBM cockails
Posted by Partha Pratim Bhaduri on Mon, 01 Jul 2013 11:35:24 GMT
View Forum Message <> Reply to Message

Hello Tetyana,
Thank you so much for resuming the discussion forum. I would like to propose to have a single forum like this di-lepton one, instead of having different formus for low-mass and charmonia or separate discussion forums for electrons/muons.

I have tried to estimate relative contributions to the di-muon spectrum from J/Psi decay and DrellYan process. The figure is attached where I have plotted the differential distribution of production cross sections as a function of pair rapidity in cms frame, for 25 GeV p+p collisions. Both the cross sections are calculated using LO pQCD (with inclusion of proper K factors) meaning for cc-bar I consider light quark annihilation & gluon fusion; for DY qq-bar annihilation only. The pdf set used is LO MSTW2008. For DY, the mass region integrated is 2.9 to 4.5 GeV, a region used by NA50 to report their J/Psi to DY ratio data.

Thnaks to Tetyana again for posting the link for the QWG latest report. Another interesting article I recently found at arxiv regarding quarkonium data:
" A database for quarkonium and open heavy-flavor production in hadronic collisions with HepData"; hep-ex/1304.2224

Regards,

Partha

File Attachments

1) Jpsivsdrell.eps, downloaded 630 times