

Table of Contents

Alessio Sarti Bs studies Page.....	1
LHCb Twiki Page.....	1
New Tuple Production.....	1
Tuple Tool.....	1
Il cugino di Feldman.....	2
Grid implementation.....	2
Full fit studies.....	2
MC studies for the beta PDFs.....	2
Radiative Tail studies.....	3
GL calibration studies.....	4
50 pb-1 4 jan 2011.....	4
Reweigh.....	4
50 pb-1 25 nov.....	5
Reweigh.....	5
Fit-t-one.....	5
4 Nov 2010.....	5
Resolution.....	5
4 Nov 2010.....	5
First GL bin.....	6
No isolation.....	6
Ip chi2 vs Ip.....	6
Giampi iso1,iso2.....	6
3 Nov 2010.....	6
2 Nov 2010.....	7
Data processing.....	9
Bs Stripping 13 processing (May 11).....	9
Bs Stripping 12 processing (> Apr 11).....	10
Added new variables.....	11
Bs Stripping 12 processing (< Feb 11).....	12
Bs Stripping 09 processing.....	12
Tupler Developments.....	13
Tupler Jobs.....	13
MC block.....	13
Mother block.....	13
Daughter block.....	13

Alessio Sarti Bs studies Page

These pages contain the Bs MuMu studies summary

LHCb Twiki Page

New Tuple Production

- Developed under DaVinci v33r8
- Code under lhcbui3 /home/asarti/cmtuser/DaVinci_v33r8/Phys/DecayTreeTuple/src

Tuple Tool

Custom code lives in TupleToolMuonVariables.cpp

- To enable the tupling the dumpFullInfo property of the Algo must be set to true.
- For now **the additional info is dumped only for MC events!**
- The additional contents to the tuple are:
 - ◆ All particle info (implemented in StatusCode
TupleToolMuonVariables::createMCBlock(Tuples::Tuple& tuple))
 - ◇ Momentum info: EVB_par_p*
 - ◇ Charge info: EVB_par_chg
 - ◇ Initial position info: EVB_par_pos_*
 - ◇ Long tracks reconstructed in the event: EVB_Nparts
 - ◇ MC matching for a given particle (bool): EVB_isMCMatched
 - ◆ For the MC matched particles (implemented in StatusCode
TupleToolMuonVariables::createMCBlock(Tuples::Tuple& tuple))
 - ◇ For the matched part (**EVB_true_part**):
 - ID of the origin particle: EVB_true_Origin_ID
 - Origin vtx of the particle (EVB_true_part_Ori_Vtx*)
 - True PID of the particle (EVB_true_part_ID)
 - True kin info for the particle (EVB_true_part_px,pypz,E,M)
- ◆ ◇ The same is done for the mother of the matched part (**EVB_true_moth**), for the granny of the matched part (**EVB_true_gran**), for the mother of the granny of the matched part (**EVB_true_mogr**), for the granny of the granny of the matched part (**EVB_true_grgr**):
- ◆ Combinatorial of all tracks with muon candidates (implemented in void
TupleToolMuonVariables::dumpIsoVariables(const LHCb::Particle* B, Tuples::Tuple& tuple
))
 - ◇ Track chi2: IsoST_trk_chi
 - ◇ Track typ: IsoST_trk_typ
 - ◇ Track ghost prob: IsoST_trk_gho
 - ◇ Track HltGood: "soST_trk_hlt
 - ◇ Than for each track, with the two candidate muons (marked as fim_* and sem_*) we save
 - Angle: IsoST_fi(se)m_angle
 - Angle: IsoST_fi(se)m_fc
 - Angle: IsoST_fi(se)m_foca
 - Angle: IsoST_fi(se)m_ips
 - Angle: IsoST_fi(se)m_pvdis
 - Angle: IsoST_fi(se)m_svdis

Il cugino di Feldman

Grid implementation

Current development performed on lhcbui1, under Erasmus.

- First of all you need to setup the ROOT version using SetupProject for consistency **SetupProject Gaudi v23r0 ROOT -v 5.32.00** .. since 5.32.02 is not available on the grid yet
- set up the Macro for job submission. (GangaMacro.C)
- compile macros using cint.
- use myganga.py to submit.

Full fit studies

MC studies for the beta PDFs.

- Output can be found in **lhcbui2**. Options under /home/asarti/cmtuser/ **bsmumu_MC_apr11** from MC and DaVinci v28r2p2.
- Jobs submitted with cards /home/asarti/cmtuser/run2010/mc/* for stripping 12 UP and DW datasets.
- The output will appear in /home/Shared/gangadir/workspace/asarti/LocalXML/#njob
- The merged output will be kept in /home/Shared/data/

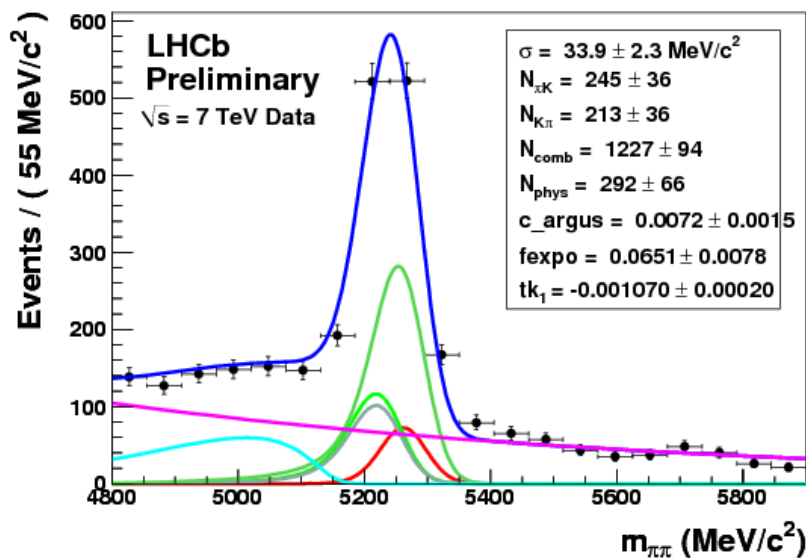
Job ID	Status	Name	N subjobs	Application	Backend	Data Type	Comments	Data sub	evts
22	submitted	MCBsmumu	6	DaVinci v28r2p2	Dirac	Strip 12 , Mag UP	MC, strip 12, Lb -> Lpi dec	[5/5/11]	N/A
23	submitted	MCBsmumu	6	DaVinci v28r2p2	Dirac	Strip 12 , Mag UP	MC, strip 12, Lb -> Lpi	[5/5/11]	N/A
24	submitted	MCBsmumu	8	DaVinci v28r2p2	Dirac	Strip 12 , Mag UP	MC, strip 12, Lb -> p pi	[5/5/11]	N/A
25	submitted	MCBsmumu	10	DaVinci v28r2p2	Dirac	Strip 12 , Mag UP	MC, strip 12, Lb -> p K	[5/5/11]	N/A
26	submitted	MCBsmumu	2	DaVinci v28r2p2	Dirac	Strip 12 , Mag UP	MC, strip 12, Bs -> rho K	[5/5/11]	N/A
27	submitted	MCBsmumu	8	DaVinci v28r2p2	Dirac	Strip 12 , Mag UP	MC, strip 12, Bs -> K pi	[5/5/11]	N/A
28	submitted	MCBsmumu	20	DaVinci v28r2p2	Dirac	Strip 12 , Mag UP	MC, strip 12, Bs -> K K	[5/5/11]	N/A
29	submitted	MCBsmumu	12	DaVinci v28r2p2	Dirac	Strip 12 , Mag UP	MC, strip 12, Bd -> K pi dec	[5/5/11]	N/A
30	submitted	MCBsmumu	2	DaVinci v28r2p2	Dirac	Strip 12 , Mag UP	MC, strip 12, Bd -> K pi nocp dec	[5/5/11]	N/A
31	submitted	MCBsmumu	1	DaVinci v28r2p2	Dirac	Strip 12 , Mag UP	MC, strip 12, Bd -> 3pi	[5/5/11]	N/A
32	submitted	MCBsmumu	19	DaVinci v28r2p2	Dirac	Strip 12 , Mag UP	MC, strip 12, Bd -> pipi	[5/5/11]	N/A
33	submitted	MCBsmumu	7	DaVinci v28r2p2	Dirac	Strip 12 , Mag DW	MC, strip 12, Lb -> Lpi dec	[5/5/11]	N/A
34	submitted	MCBsmumu	7	DaVinci v28r2p2	Dirac	Strip 12 , Mag DW	MC, strip 12, Lb -> Lpi	[5/5/11]	N/A
35	submitted	MCBsmumu	10	DaVinci v28r2p2	Dirac	Strip 12 , Mag DW	MC, strip 12, Lb -> p pi	[5/5/11]	N/A

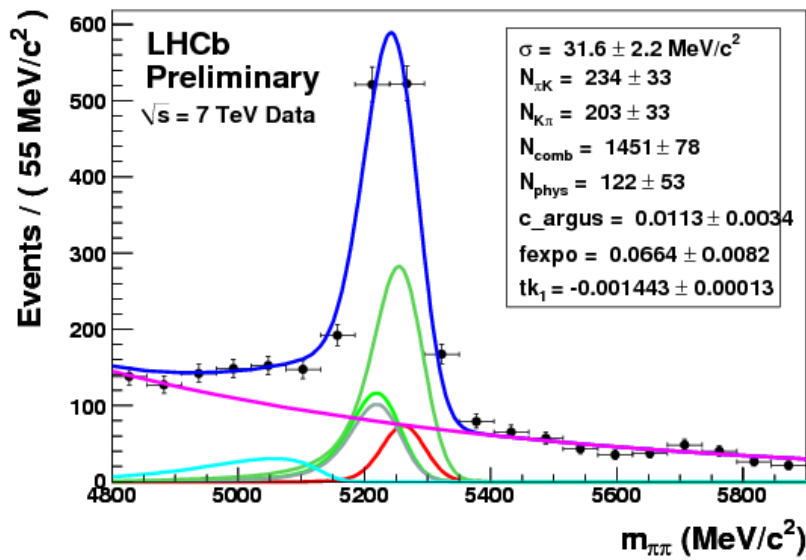
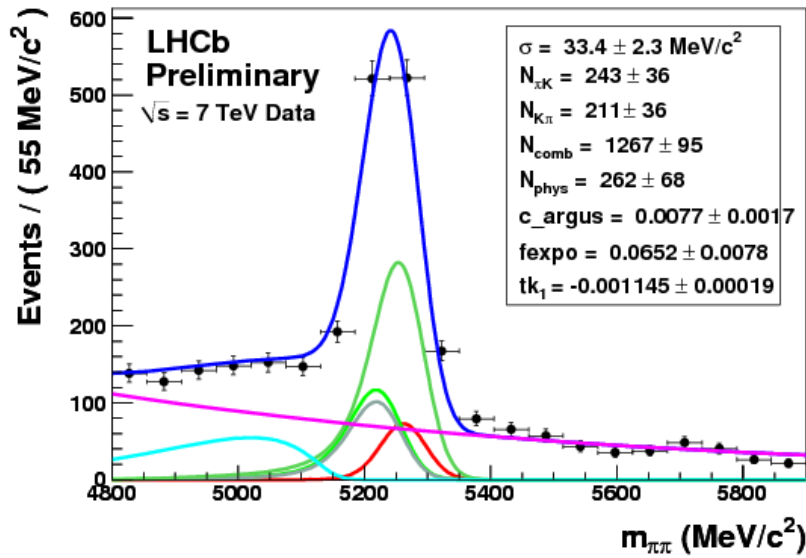
36	submitted	MCBsmumu	7	DaVinci v28r2p2	Dirac	Strip 12 , Mag DW	MC, strip 12, Lb -> p K	[5/5/11]	N/A
37	submitted	MCBsmumu	1	DaVinci v28r2p2	Dirac	Strip 12 , Mag DW	MC, strip 12, Bs -> rho K	[5/5/11]	N/A
38	submitted	MCBsmumu	11	DaVinci v28r2p2	Dirac	Strip 12 , Mag DW	MC, strip 12, Bs -> K pi	[5/5/11]	N/A
39	submitted	MCBsmumu	21	DaVinci v28r2p2	Dirac	Strip 12 , Mag DW	MC, strip 12, Bs -> K K	[5/5/11]	N/A
40	submitted	MCBsmumu	12	DaVinci v28r2p2	Dirac	Strip 12 , Mag DW	MC, strip 12, Bd -> K pi dec	[5/5/11]	N/A
41	submitted	MCBsmumu	2	DaVinci v28r2p2	Dirac	Strip 12 , Mag DW	MC, strip 12, Bd -> K pi nocp dec	[5/5/11]	N/A
42	submitted	MCBsmumu	1	DaVinci v28r2p2	Dirac	Strip 12 , Mag DW	MC, strip 12, Bd -> 3pi	[5/5/11]	N/A
43	submitted	MCBsmumu	17	DaVinci v28r2p2	Dirac	Strip 12 , Mag DW	MC, strip 12, Bd -> pipi	[5/5/11]	N/A

Radiative Tail studies

Flag	Detailed description	BsKpi
Con_AfloRTfsff_n2BB	Kept the BR constraints, All the mass parameters floating. Floating Slope and Fraction of radiative tail to xxx and 6%. Implemented correct beta PDF (sidebands)	NO
NoCon_AfloRTfsff_n2BB	Removed the BR constrain w.r.t previous line	NO
NoCon_AfloRTfs_n2BB	Only the slope of the Radiative Tail is floating, the fraction is fixed [probably buggy plot??]	NO
NoCon_flomeRTfs_n2BB	Removed the BR constraints. Mean of the Mass PDF is floating, the width is fixed. Only the slope of the Radiative Tail is floating, the fraction is fixed	NO
RT_BB	Using BR constraints. Keeping everything floating, using a proper Beta function.	NO
RTfw_BB	Using the BR constraints. Fixed the mass width. Proper beta function.	NO

* Beta function Effect: 'current' result, 'sidebands' results, RooBetaFun result [not correct]





GL calibration studies

50 pb-1 4 jan 2011

Reweigh

Setup	all	[0.-0.25] (1)	[0.0-0.05] (2)	[0.05-0.25]	[0.25-0.5]	[0.5-0.75]	[0.75-1]
50 pb-1, nofit	4613+/-295.5	1820+/-296	836+/-296	983.7+/-110.9	863.9+/-57.36	934.9+/-42.72	994.4+/-38.5
50 pb-1, nofit, npv==1	1297+/-117.8	434+/-118	184+/-118	249.8+/-46.78	265.4+/-26.48	273.3+/-20.86	325.3+/-19.98
50 pb-1, ? full fit, yield	-	-	-	-	1035+/-198	1097+/-56	1145+/-43
50 pb-1, ? full fit, sigma	-	-	-	-	19.59 +/- 2.80	25.10 +/- 2.75	30.86 +/- 2.14

50 pb-1, ? full fit, m_Bd	-	-	-	5.2900e+03 +/- 6.01e+00	5.2900e+03 +/- 2.43e+00	5.2900e+03 +/- 7.39e-01
50 pb-1, ? full fit, m_Bs	-	-	-	5.3705e+03 +/- 2.92e+00	5.3765e+03 +/- 2.92e+00	5.3674e+03 +/- 2.83e+00

50 pb-1 25 nov

Reweigh

Setup	all	[0.-0.25] (1)	[0.0-0.05] (2)	[0.05-0.25]	[0.25-0.5]	[0.5-0.75]	[0.75-1]
50 pb-1, nofit	4613+/-295.5	1870+/-296	886+/-296	983.7+/-110.9	863.9+/-57.36	934.9+/-42.72	994.4+/-38.5
50 pb-1, nofit, Ip,Isos cut	4014+/-235.3	1176+/-235	233+/-235	942.9+/-105.9	878.4+/-54.23	959.4+/-40.14	1001+/-36.5
50 pb-1, nofit, Ip,Isos cut , reweigh	4014+/-235.3	1067+/-235	260+/-235	807.4+/-114.4	905.4+/-62.06	979.9+/-43.95	1062+/-40.13
50 pb-1, nofit, Ip,Isos,doca reweigh nocut	4613+/-295.5	1438+/-296	514+/-296	924.2+/-146.9	889.3+/-72.93	1020+/-51.14	1266+/-46.08

Fit-t-one

4 Nov 2010

Setup	[0.25-0.5]	[0.5-0.75]	[0.75-1]
No Cuts, No Pid	Ntot=700 , Nbkg=6.2k, sigma=24.0+/-5.5 , Bd=5276+/-23, Bs=5353+/-38, c_a=0.0021+/-0.0040, slp=0.015+/-0.015	Ntot=661 , Nbkg=2.4k, sigma=27.46+/-0.82 , Bd=5273.5+/-4.0, Bs=5359.2+/-3.2, c_a=0.0027+/-0.0044, slp=0.02+/-0.018	Ntot=695 , Nbkg=1.2k, sigma=26.92+/-0.2 , Bd=5273.2+/-2.4, Bs=5356.4+/-0.77, c_a=0.0167+/-0.0051, slp=0+/-0.012

Resolution

4 Nov 2010

Data obtained after 'hard' pid cut (abs)>15 for pi and K

Setup	[0.25-0.5]	[0.5-0.75]	[0.75-1]
Sing	Nsig 99+/-13, bkg 315+/-19, IM	Nsig 84+/-11, bkg 160+/-18, IM	Nsig 95+/-10, bkg 64+/-15, IM
Gau	5226.5+/-3.9, sig 28.0+/-3.6	5221.8+/-4.2, sig 30.3+/-3.3	5225.8+/-3.5, sig 29.6+/-3.3

First GL bin**No isolation**

Setup	all	[0.-0.25] (1)	[0.0-0.05] (2)	[0.05-0.25]	[0.25-0.5]	[0.5-0.75]	[0.75-1]
20 pb-1, nofit	3293+/-232.8	1412+/-233	985+/-233	788.3+/-105.2	620.2+/-56.36	635.5+/-39.26	625.2+/-34.82
20 pb-1, sing gau fit	3293+/-232.8	x+/-233	x+/-233	870+/-113	631+/-56	663+/-41	662+/-37

lp chi2 vs lp

Setup	all	[0.-0.25] (1)	[0.0-0.05] (2)	[0.05-0.25]	[0.25-0.5]	[0.5-0.75]	[0.75-1]
20 pb-1, ipchi2, 5 variables	3293+/-232.8	x+/-233	x+/-233	626.4+/-85.65	573.3+/-46.78	669.4+/-37.3	587.9+/-30.46
20 pb-1, ipchi2, 4 variables [noiso]	3293+/-232.8	x+/-233	x+/-233	760.8+/-96.36	593.5+/-54.6	615+/-40.56	599.2+/-33.95

Giampi iso1,iso2

- Cutting on pT at 800 does not have any impact

Setup	all	[0.-0.25] (1)	[0.0-0.05] (2)	[0.05-0.25]	[0.25-0.5]	[0.5-0.75]	[0.75-1]
20 pb-1, nofit	3293+/-232.8	1454+/-233	830+/-233	663.8+/-94.31	588.5+/-48.57	633.7+/-36.39	616.6+/-31.78
20 pb-1, nofit, pT cut	3281+/-220.1	1454+/-220	761.3+/-220	692.7+/-89.3	599.6+/-46.6	619.1+/-35.31	600.4+/-31.09
20 pb-1, nofit, pT cut, reweighting	3281+/-220.1	1185+/-220	550+/-220	635+/-103.3	643.7+/-59.53	728.8+/-44.65	723.4+/-41.08
20 pb-1, nofit, pT cut, reweighting, nPV==1	927.4+/-90.64	266.2+/-91	211+/-91	54.61+/-42.6	207.3+/-25.98	223.2+/-20.66	230.7+/-17.9

3 Nov 2010

- (1) Obtained as a difference from the Total (column 2) and columns 6,7,8
- (2) Obtained as a difference from column 3 and column 5

Setup	all	[0.-0.25] (1)	[0.0-0.05] (2)	[0.05-0.25]	[0.25-0.5]	[0.5-0.75]	[0.75-1]
20 pb-1, nofit	3293+/-232.8	1459+/-230	809+/-230	650.4+/-90.34	571.9+/-46.64	620.3+/-35.44	641.7+/-31.25
20 pb-1, fit sing gau	3449+/-254 40.3+/-3.3 5247.4+/-3.0	-	-	726+/-101 44.2+/-6.6 5253.6+/-6.5	618+/-46 32.4+/-2.4 5240.8+/-2.6	640+/-37 38.0+/-2.2 5239.7+/-2.3	686+/-34 39.2+/-2.0 5241.3+/-2.0

AlessioSartiBsMuMu < Sandbox < TWiki

	220k			32k	6.8k	2.7k	1400
20 pb-1, nofit, nPV==1	923.7+/-94.34	327+/-94	168+/-94	159.3+/-38.23	193.4+/-21.68	194.2+/-17.14	210.2+/-15.92
20 pb-1, nofit, nPV==2	1249+/-136.3	575+/-136	302+/-136	273.1+/-53.6	179.2+/-26.72	244.7+/-21.26	249.6+/-18.7
20 pb-1, nofit, nPV>2	1125+/-163.5	552+/-163	333+/-163	219+/-61.86	201.9+/-31.46	184.6+/-22.56	185.9+/-19.28
20 pb-1, fit sing gau, nPV>2	1213+/-183 42.6+/-7.0 5248.4+/-6.4 110k	-	-	257+/-65 50+/-31 5236+/-15 16k	200+/-30 32.5+/-5.4 5247.5+/-5.3 3.4k	191+/-23 34.5+/-4 5236.6+/-4.4 1.4k	187+/-20 37.4+/-4.1 5246.6+/-4.3 800
20 pb-1, nofit, hadTos	1991+/-125.5	688+/-126	298+/-126	390.5+/-51.02	379.4+/-30.26	458.9+/-26.19	465.5+/-24.06
20 pb-1, nofit, hadTis	794.6+/-141.3	387+/-142	229+/-142	157.8+/-53.95	115.7+/-26.36	148+/-19.08	144.5+/-16.28

2 Nov 2010

Setup	all	1st bin [0.05-0.25]	2nd bin	3rd bin	4th bin
	Nsig , sigma, mean, Nbg	Nsig , sigma, mean, Nbg	Nsig , sigma, mean, Nbg	Nsig , sigma, mean, Nbg	Nsig , sigma, mean, Nbg
22 oct meet	1676+/- 185, 37.7+/-3.9 5250.6 +/- 3.9 106k 627	-	352+/- 40, 36.1+/-4.4 5248 +/- 4.1 4.6k	357+/- 26, 39.1+/-2.9 5238 +/- 3.0 1.1k	340+/- 21, 39.6+/-2.5 5243 +/- 2.6 300
Trk chi2<3, ism, [4800,5950]	1482+/- 118, 35.9+/-2.9 5248+/-2.9 53k 482,445	356+/- 60, 41.4+/-7.3 5251.5 +/- 7.7 13k	320+/- 31, 34.8+/-3.5 5249 +/- 3.5 2.4k	357+/- 23, 39.1+/-2.5 5238 +/- 2.7 620	323+/- 20, 40.6+/-2.5 5243 +/- 2.7 200
Trk chi2<3, ism, [4900,5650]	1408+/- 131, 34.7+/-2.9 5247.6+/-3.0 37k 424,430	344+/- 62, 40.2+/-7.2 5249.7 +/- 7.6 9k	321+/- 34, 34.9+/-3.7 5249 +/- 3.6 1.7k	350+/- 25, 38.8+/-2.7 5238 +/- 2.8 500	313+/- 21, 39.4+/-2.6 5243 +/- 2.7 180
Trk chi2<3, ism, [5000,5500]	1452+/- 200, 35.5+/-3.7 5248.6+/-3.2 25k 468,450	360+/- 90, 41.4+/-8.4 5249.7 +/- 7.8 6k	-	-	-
Trk chi2<3, ism, nPV<=2, [4800,5950]	1078+/- 98, 37.8+/-3.6 5249.1+/-3.4 32k 353,302	242+/- 48, 42.7+/-8.6 5257.4 +/- 9.9 8k	224+/- 24, 32.4+/-3.7 5251.1 +/- 3.7 1.5k	261+/- 20, 37.0+/-2.9 5240.8 +/- 3.0 430	240+/- 17, 42.0+/-3.0 5240.5 +/- 3.2 140
Trk chi2<3, ism, nPV == 1 [4800,5950]	452+/- 58, 37.0+/-5.1 5245.7+/-4.9 12k 108,96	77+/- 30, 40.+/-30 5257 +/- 20 3k	110+/- 18, 39.+/-7.1 5253.2 +/- 6.8 620	115+/- 13, 39.2+/-4.2 5238.3 +/- 4.8 200	119+/- 12, 39.4+/-3.5 5244.3 +/- 4.1 100
22 oct meet, nofit eps	1572+/-161.7 590	-	341.7+/-37.73	325.2+/-24.59	314.7+/-20.14
		322.1+/-57.48	309.4+/-30.01	332.1+/-22.25	299.2+/-19.13

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Trk $\chi^2 < 3$, ism, nofit	1392+/-117 452,402 eps				
Retuned GL	1594+/-160, 36.9+/-3.9 5250.9 +/- 3.8 100k 654,394	315+/-64 42.7+/-8.5 5270.1+/-9.5 15k	301+/- 31, 33.6+/-3.4 5244 +/- 3.7 3.1k	299+/- 25, 35.6+/-3 5241.5 +/- 3.1 1.2k	340+/- 23, 41.2+/-2.9 5239 +/- 3.0 560
Retuned GL Trk $\chi^2 < 3$, ism, nPV ≤ 2 [4800,5950]	1030+/- 95, 37.5+/-3.6 5249.4+/-3.5 30k 344,201	161+/- 31, 31.9+/-5.5 5258.5 +/- 7.1 4.8k	205+/- 21, 31.9+/-3.1 5242.5 +/- 3.5 1k	250+/- 19, 39.1+/-2.9 5242.4 +/- 3.2 430	231+/- 17, 38.6+/-2.8 5241.1 +/- 3.0 210
Retuned GL Trk $\chi^2 < 3$, ism, nPV $== 1$ [4800,5950]	439+/- 58, 37.9+/-5.3 5245.4+/-5.1 11k 104,82.5	66+/- 20, 34.4+/-8.8 5254 +/- 12 1.8k	98+/- 16, 47.1+/-7.7 5241.9 +/- 7.9 410	122+/- 13, 38.2+/-3.7 5242.4 +/- 4.3 200	115+/- 11, 34.5+/-2.8 5244.8 +/- 3.5 100
Retuned GL, nofit	1520+/-157.4 656,360	288.2+/-61.45	262.6+/-31.81	289.2+/-24.18	311.9+/-21.54
15 pb-1, Retuned	2592+/-205, 38.5+/-3.1 5247.9 +/- 3.1 153k 1167,659	527+/-80 40.7+/-6.6 5260.3+/-6.5 23k	450+/- 39, 33.3+/-2.8 5239.6 +/- 3.1 4.8k	459+/-31, 35.3+/-2.4 5241.0 +/- 2.5 1.9k	516+/- 29, 39.9+/-2.4 5241.7 +/- 2.3 940
15 pb-1, Retuned, nofit	2492+/-194.8 1166,620	495.8+/-76.2	399+/-39.18	447.9+/-29.8	478.9+/-26.55
15 pb-1, Retuned, Bhhfit (25 MeV fix)	-	-	-	-	526.8+/-26.86
15 pb-1, Retuned, Trk $\chi^2 < 3$, ism	2160+/-140, 35.8+/-2.4 5244.7 +/- 2.4 76k	-	-	-	-
15 pb-1, Retuned, nofit, Trk $\chi^2 < 3$, ism	2110+/-140.4 774,518	414.6+/-55.66	423.3+/-31.92	463.5+/-26.63	449.6+/-23.93
15 pb-1, Retuned, Trk $\chi^2 < 3$, ism, nPV $== 1$	656+/-71, 36.4+/-4.5 5243.3 +/- 3.9 16k 160,158	126+/-25 33.4+/-6.8 5249.5+/-7.4 2.6k	151+/-19, 40.6+/-5.8 5240.7 +/- 5.1 600	181+/-16, 38.7+/-3.0 5242.6 +/- 3.6 260	164+/- 14, 37.2+/-3.0 5244.0 +/- 3.3 130
15 pb-1, Retuned, nofit, Trk $\chi^2 < 3$, ism, nPV $== 1$	665.9+/-66.21 197,156	125.1+/-27.17	141+/-16.66	173.1+/-15.13	155+/-13.57
15 pb-1, Retuned, Trk $\chi^2 < 3$, ism, nPV $== 2$	909+/-91, 37.7+/-3.8 5245.7 +/- 3.9 29k	-	-	-	-
15 pb-1, Retuned, nofit, Trk $\chi^2 < 3$, ism, nPV $== 2$	863.3+/-87.14 346,169	135.1+/-34.26	162.7+/-19.6	173.7+/-16.22	179.7+/-14.93
15 pb-1, Retuned, Trk $\chi^2 < 3$, ism, nPV > 2	622+/-78, 34.0+/-4.2 5245.0 +/- 4.9 31k	-	-	-	-
15 pb-1, Retuned, nofit,	581.1+/-88.02 227,193	154.9+/-34.43	120.5+/-18.9	117.8+/-14.72	115.9+/-12.86

Trk $\chi^2 < 3$, ism, nPV > 2					
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Data processing

Bs Stripping 13 processing (May 11)

- Output can be found in **lhcbui2**. Options under `/home/asarti/cmtuser/ bsmumu_stp13_may11` (for data DaVinci v28r2p2).
- Jobs submitted with cards `/home/asarti/cmtuser/run2010/data/strip13*` for stripping 13 UP and DW datasets .
- The output will appear in `/home/Shared/gangadir/workspace/asarti/LocalXML/#njob`
- The merged output will be kept in `/home/Shared/data/`

Job ID	Status	Name	N subjobs	Application	Backend	Data Type	Comments	Data sub	evts
21	completed	Bsmumu	21	DaVinci v28r2p2	Dirac	Strip 13 , Mag DW	Data, strip 13, full sample, 2body tupler. + new variables	[3/5/11]	N/A
20	completed	Bsmumu	24	DaVinci v28r2p2	Dirac	Strip 13 , Mag UP	Data, strip 13, full sample, 2body tupler. + new variables	[3/5/11]	N/A
46	completed	Bsmumu	40	DaVinci v28r2p2	Dirac	Strip 13 , Mag UP	Data, strip 13, full sample, 2body tupler. + new variables CALIBRATION, JpsiFromBnopicdnomip	[8/5/11]	N/A
47	completed	Bsmumu	54	DaVinci v28r2p2	Dirac	Strip 13 , Mag DW	Data, strip 13, full sample, 2body tupler. + new variables CALIBRATION, JpsiFromBnopicdnomip	[8/5/11]	N/A
50	completed	Bsmumu	40	DaVinci v28r2p2	Dirac	Strip 13 , Mag UP	Data, strip 13, full sample, 2body tupler. + new variables CALIBRATION, JpsiFromBnopic	[8/5/11]	N/A
51	completed	Bsmumu	54	DaVinci v28r2p2	Dirac	Strip 13 , Mag DW	Data, strip 13, full sample, 2body tupler. + new variables CALIBRATION, JpsiFromBnopic	[8/5/11]	N/A
52	completed	Bsmumu	118	DaVinci v28r2p2	Dirac	Strip 13 , Mag DW	Data, strip 13, full sample, 2body tupler. + new variables DIMUON, Bs2MuMuNoMuID	[12/5/11]	N/A
53	completed	Bsmumu	120	DaVinci v28r2p2	Dirac	Strip 13 , Mag UP	Data, strip 13, full sample, 2body tupler. + new variables DIMUON, Bs2MuMuNoMuID	[12/5/11]	N/A
57	completed	Bsmumu	120		Dirac			[12/5/11]	N/A

				DaVinci v28r2p2		Strip 13 , Mag UP	Data, strip 13, full sample, All tuplers no fix		
58	completed	Bsmumu	118	DaVinci v28r2p2	Dirac	Strip 13 , Mag DW	Data, strip 13, full sample, All tuplers no fix	[12/5/11]	N/A
59	completed	Bsmumu	120	DaVinci v28r2p2	Dirac	Strip 13 , Mag UP	Data, strip 13, full sample, All tuplers TisTos fix	[12/5/11]	N/A
60	completed	Bsmumu	118	DaVinci v28r2p2	Dirac	Strip 13 , Mag DW	Data, strip 13, full sample, All tuplers TisTos fix	[12/5/11]	N/A
61	completed	Bsmumu	70	DaVinci v28r2p2	Dirac	Strip 13 , Mag DW	Data, strip 13, 2body tupler. CALIBRATION, JpsiFromBnopicd	[15/5/11]	30 pb-1 , 7.5 M
62	completed	Bsmumu	56	DaVinci v28r2p2	Dirac	Strip 13 , Mag UP	Data, strip 13, 2body tupler. CALIBRATION, JpsiFromBnopicd	[15/5/11]	>11 pb-1 , 7.8 M
63	completed	Bsmumu	70	DaVinci v28r2p2	Dirac	Strip 13 , Mag DW	Data, strip 13, 2body tupler. CALIBRATION, JpsiFromBnopicdnomicp	[15/5/11]	30 pb-1 , 7.6 M
64	completed	Bsmumu	56	DaVinci v28r2p2	Dirac	Strip 13 , Mag UP	Data, strip 13, 2body tupler. CALIBRATION, JpsiFromBnopicdnomicp	[15/5/11]	>11 pb-1 , 7.8 M
67	completed	Bsmumu	70	DaVinci v28r2p2	Dirac	Strip 13 , Mag DW	Data, strip 13, 2,3 body tupler. CALIBRATION	[15/5/11]	30 pb-1 , 7.6 M
66	completed	Bsmumu	56	DaVinci v28r2p2	Dirac	Strip 13 , Mag UP	Data, strip 13, 2,3 body tupler. CALIBRATION	[15/5/11]	>11 pb-1 , 7.8 M

Bs Stripping 12 processing (> Apr 11)

- Output can be found in **lhcbuil**. Options under /home/asarti/cmtuser/ **bsmumu_stp12_apr11** (for data) and **bsmumu_MC_apr11** from MC and DaVinci v28r2.
- Jobs submitted with cards /home/asarti/cmtuser/run2010/strip/* for stripping 12 UP and DW datasets and mc/* from bsmumu and bmbumu incl MC samples.
- The output will appear in /home/Shared/gangadir/workspace/asarti/LocalXML/#njob
- The merged output is kept in /home/Shared/data/

Job ID	Status	Name	N subjobs	Application	Backend	Data Type	Comments	Data sub	evts
50	completed	Bsmumu	27	DaVinci	Dirac			[20/4/11]	N/A

						Strip 12 , Mag DW	Data, strip 12, full sample, 2body tupler.		
51	completed	Bsmumu	28	DaVinci	Dirac	Strip 12 , Mag UP	Data, strip 12, full sample, 2body tupler.	[20/4/11]	N/A
66	completed	MCBsmumu	4	DaVinci	Dirac	MC Bsmumu Strip 12 , Mag UP	MC, strip 12, full sample, 2body tupler.	[24/4/11]	N/A
57	completed	MCBsmumu	2	DaVinci	Dirac	MC Bsmumu Strip 12 , Mag DW	MC, strip 12, full sample, 2body tupler.	[21/4/11]	N/A
58	submitted	MCBsmumu	61	DaVinci	Dirac	MC BmuBmu Strip 12 , Mag DW	MC, strip 12, full sample, 2body tupler.	[21/4/11]	N/A
59	submitted	MCBsmumu	62	DaVinci	Dirac	MC BmuBmu Strip 12 , Mag UP	MC, strip 12, full sample, 2body tupler.	[21/4/11]	N/A

Added new variables

- Output can be found in **lhcbui2**. Options under `/home/asarti/cmtuser/ bsmumu_stp12_apr11` (for data) and `bsmumu_MC_apr11` from MC and DaVinci v28r2p2.
- Jobs submitted with cards `/home/asarti/cmtuser/run2010/strip/*` for stripping 12 UP and DW datasets and `mc/*` from bsmumu and bmuBmu incl MC samples.
- The output will appear in `/home/Shared/gangadir/workspace/asarti/LocalXML/#njob`
- The merged output will be kept in `/home/Shared/data/`

Job ID	Status	Name	N subjobs	Application	Backend	Data Type	Comments	Data sub	evts
6	submitted	Bsmumu	28	DaVinci v28r2p2	Dirac	Strip 12 , Mag UP	Data, strip 12, full sample, 2body tupler. + new variables	[29/4/11]	N/A
7	submitted	Bsmumu	27	DaVinci v28r2p2	Dirac	Strip 12 , Mag DW	Data, strip 12, full sample, 2body tupler. + new variables	[29/4/11]	N/A
8	submitted	MCBsmumu	91	DaVinci v28r2p2	Dirac	Strip 12 , Mag UP	MC bmuBmu, strip 12, full sample, 2body tupler. + new variables	[29/4/11]	N/A
9	submitted	MCBsmumu	91	DaVinci v28r2p2	Dirac	Strip 12 , Mag UP	MC bmuBmu, strip 12, full sample, 2body tupler. + new variables	[29/4/11]	N/A
10	submitted	MCBsmumu	5	DaVinci v28r2p2	Dirac	Strip 12 , Mag DW	MC bsmumu, strip 12, full sample, 2body tupler. + new	[29/4/11]	N/A

							variables		
11	submitted	MCBsmumu	6	DaVinci v28r2p2	Dirac	Strip 12 , Mag UP	MC bsmumu, strip 12, full sample, 2body tupler. + new variables	[29/4/11]	N/A

Bs Stripping 12 processing (< Feb 11)

- Output can be found in **lhcbui1**. Options under **/home/asarti/cmtuser/gaia_jan11** and DaVinci v26r3p1.
- Jobs submitted with cards **/home/asarti/cmtuser/gaia_jan11/jan11/*** for stripping 12 UP and DW datasets

Job ID	Status	Name	N subjobs	Application	Backend	Data Type	Comments	Data sub	evts
34	completed	UJpsiPhiUP	1	DaVinci	Dirac	Strip 12	JpsiPhi Detached test [no outputdata]	[14/1/11]	N/A
35	completed	UJpsiPhiUP	1	DaVinci	Dirac	Strip 12	JpsiPhi Detached test	[14/1/11]	N/A
36	completed	UJpsiPhiUP	49	DaVinci	Dirac	Strip 12	JpsiPhi Detached UP	[14/1/11]	N/A
37	completed	DJpsiPhiDW	45	DaVinci	Dirac	Strip 12	JpsiPhi Detached DW	[14/1/11]	N/A
38	completed	UnbJpsiPhiDW	45	DaVinci	Dirac	Strip 12	JpsiPhi Unbiased DW	[14/1/11]	N/A
39	completed	UnbJpsiPhiUP	49	DaVinci	Dirac	Strip 12	JpsiPhi Unbiased UP	[14/1/11]	N/A
40	completed	UnbBsmumuNoIDUP	49	DaVinci	Dirac	Strip 12	Bsmumu No μ ID UP	[14/1/11]	N/A
41	completed	UnbBsmumuNoIDDW	45	DaVinci	Dirac	Strip 12	Bsmumu No μ ID DW	[14/1/11]	N/A

Bs Stripping 09 processing

- Output can be found in **/afs/Inf.infn.it/project/lhcb/user/asarti/workspace/asarti/LocalXML**
- Jobs submitted with cards
/afs/cern.ch/user/a/asarti/cmtuser/run2010/data/LHCb_Collision10_429155_RealData+Reco05-Stripping09-Pr
for MagDw. Cards obtained 23/09 around 16:00

Job ID	Status	Name	N subjobs	Application	Backend	Data Type	Comments	Data sub	evts
143	submitted	Tupler	104	DaVinci	Dirac	Data 10	BsMuMu no μ ID line	[23/9/10]	N/A
144	submitted	Tupler	104	DaVinci	Dirac	Data 10	Jpsi detached line	[23/9/10]	N/A
145	submitted	Tupler	104	DaVinci	Dirac	Data 10	B+->JpsiK+ line	[23/9/10]	N/A
146	submitted	Tupler	104	DaVinci	Dirac	Data 10	Bs ->JpsiPhi line	[23/9/10]	N/A

Tupler Developments.

Code can be found on **lhcbui1** under `/home/asarti/cmtuser/tupler/stp12_apr11`

- GangaJob.py creates the Ganga Job
- GangaTupler_apr11.py --> creates the sequence and setup the DaVinci Algo

Tupler Jobs

Job ID	Status	Name	N subjobs	Application	Backend	Data Type	Comments	Data sub	evts
61	completed	Tupler	28	DaVinci	Dirac	Strip 12 , Mag UP	Data, strip 12, full sample, 2body tupler. DISABLED FILTER on DATAONDEMAND	[20/4/11]	N/A
65	failed	Tupler	28	DaVinci	Dirac	Strip 12 , Mag UP	Data, strip 12, full sample, 2body tupler. FIXED FILTER on DATAONDEMAND	[20/4/11]	N/A
68	submitted	Tupler	12	DaVinci	Dirac	Strip 12 , Mag UP	Data, strip 12, full sample, 2body tupler. First attempt to TisTos	[28/4/11]	N/A

MC block

To be addressed

- Tools to be looked at : TupleToolGeneration + MCTupleToolInteractions
 - ◆ MCI and MC stuff.

Mother block

- Got rid of calcLifetime (dumb calculation, not used)
- **Need to implement Doca, isolation**

Daughter block

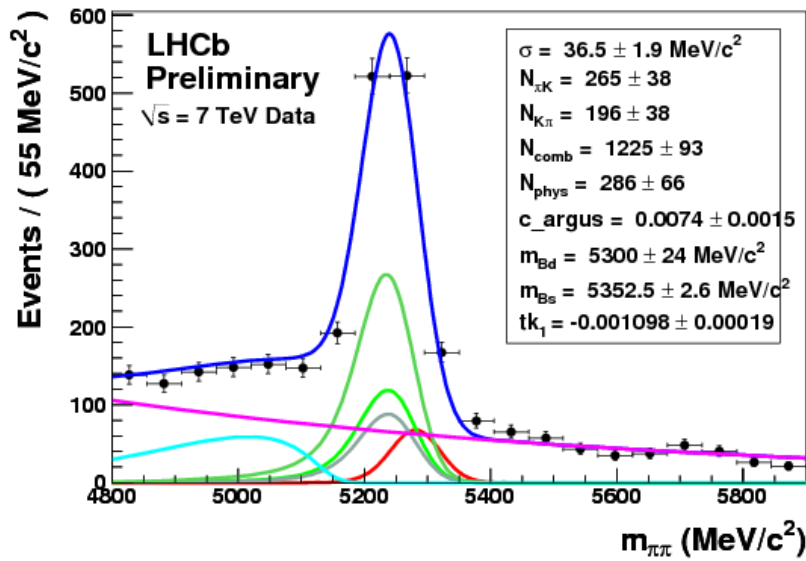
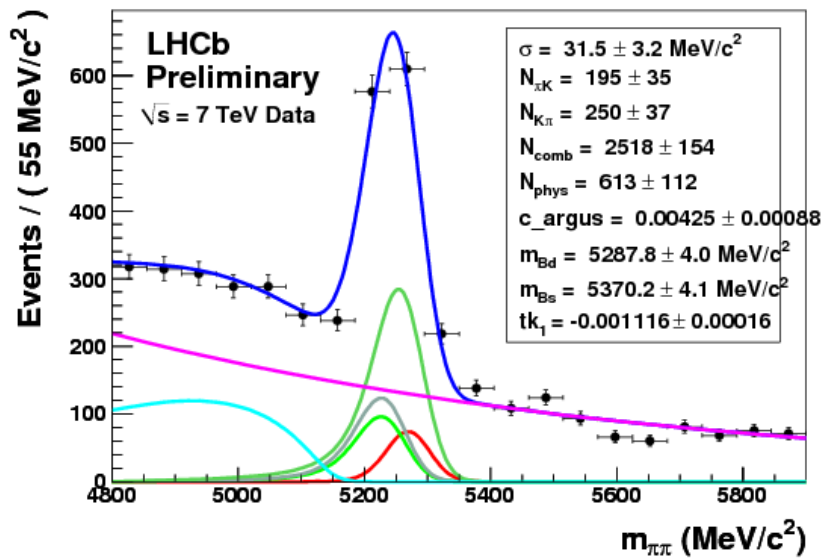
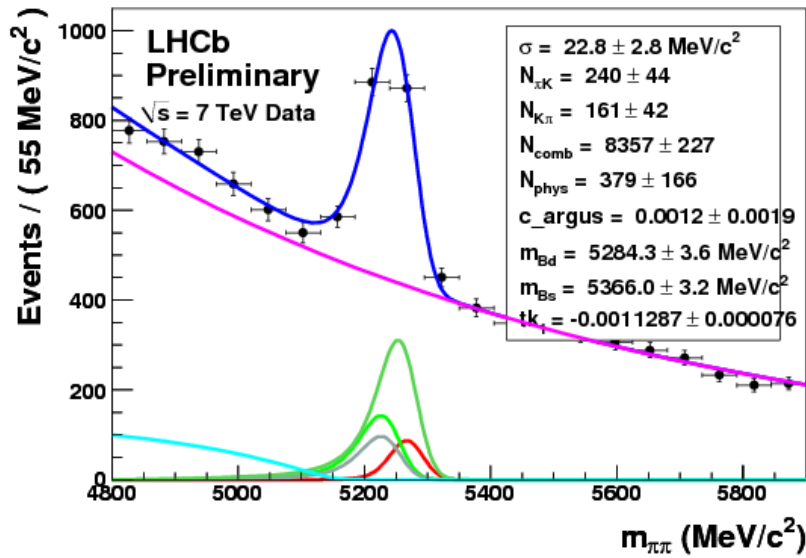
- Should remove flag (no longer used)
- Moved some variables to TupleToolPid

```
Float_t      P1_MuIsml[100];    //[nP]
Float_t      P1_NShared[100];   //[nP]
```

- To be checked

```
Float_t      P1_DistAve[100];   //[nP]
```

-- AlessioSarti - 21-Sep-2010



This topic: Sandbox > AlessioSartiBsMuMu
 Topic revision: r60 - 2014-01-16 - AlessioSarti



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