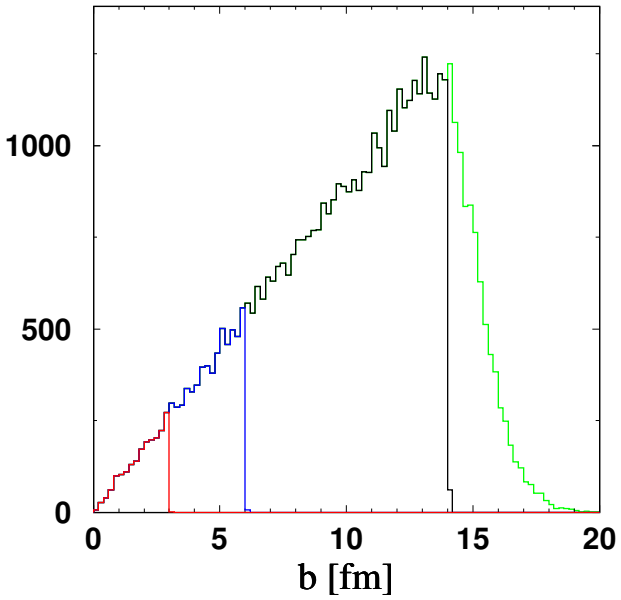
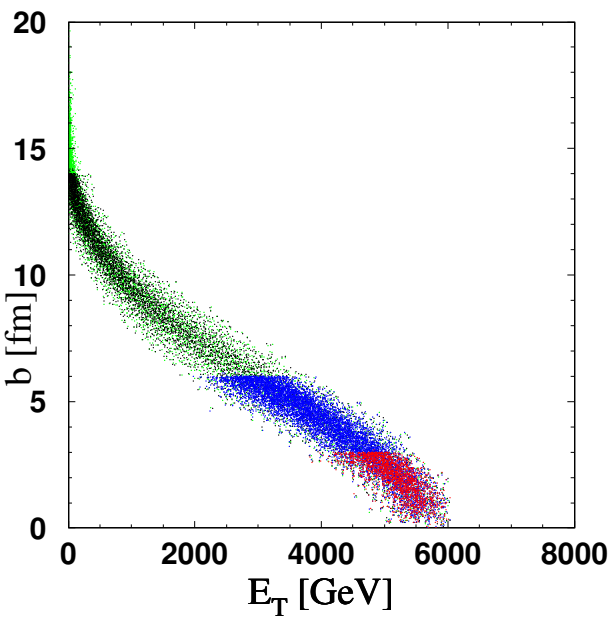
# neXus (v1.0) $\sqrt{s}$ = 200 A GeV Au + Au

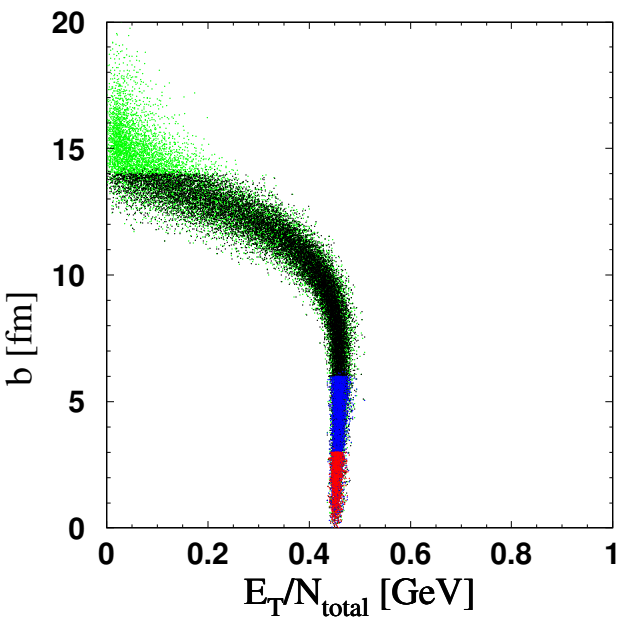


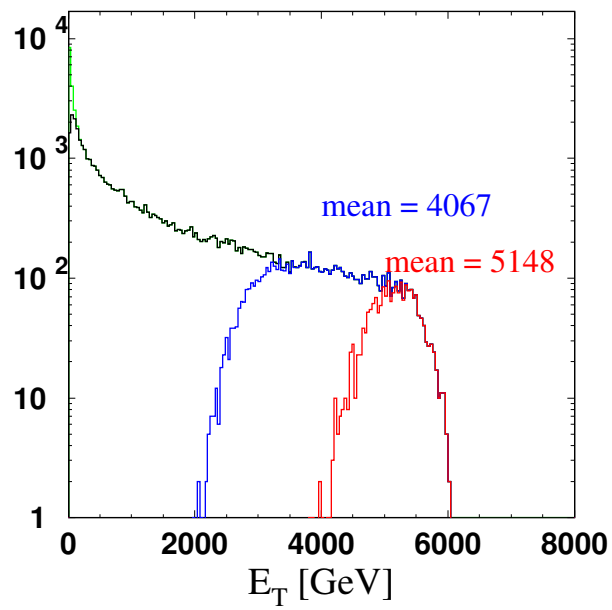

b≤14 [fm] 43604 event

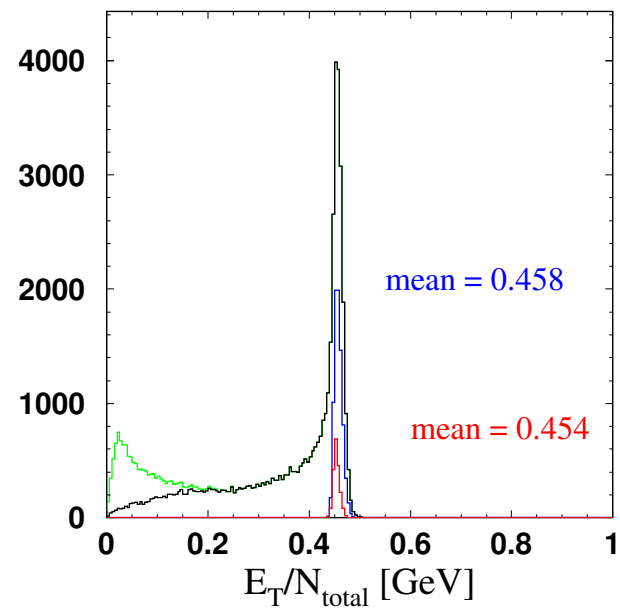
b≤6 [fm] 7978 event

b≤3 [fm] 1980 event

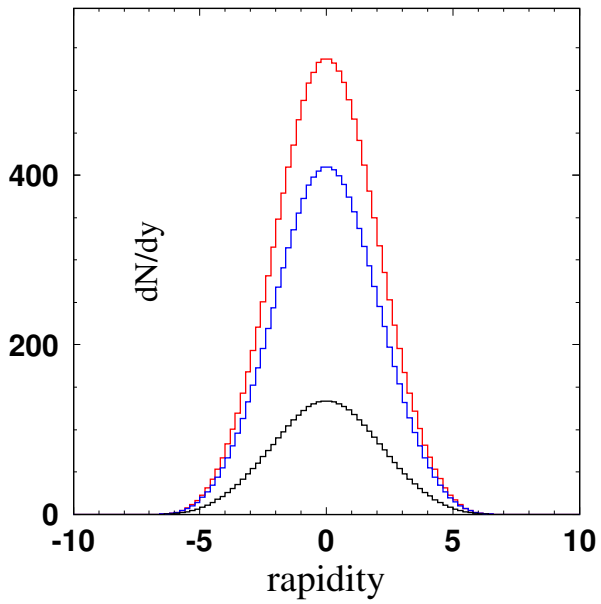


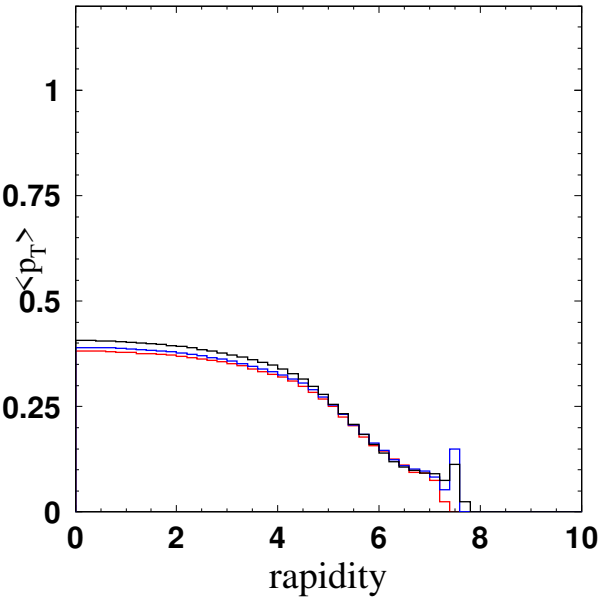



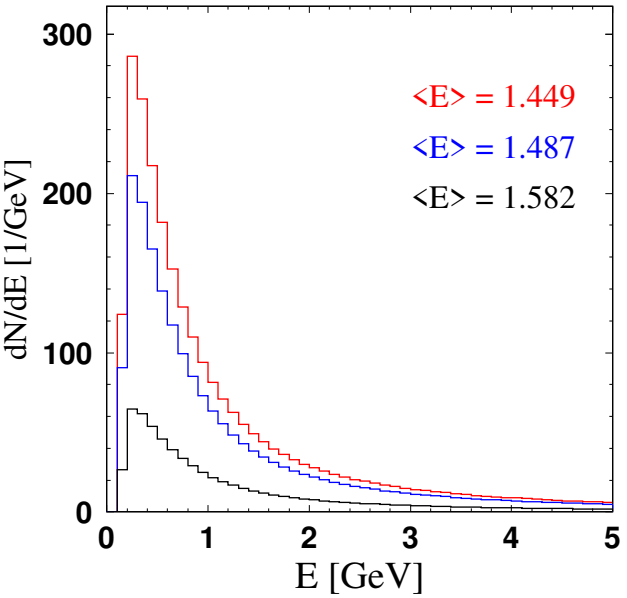
$\pi^+$

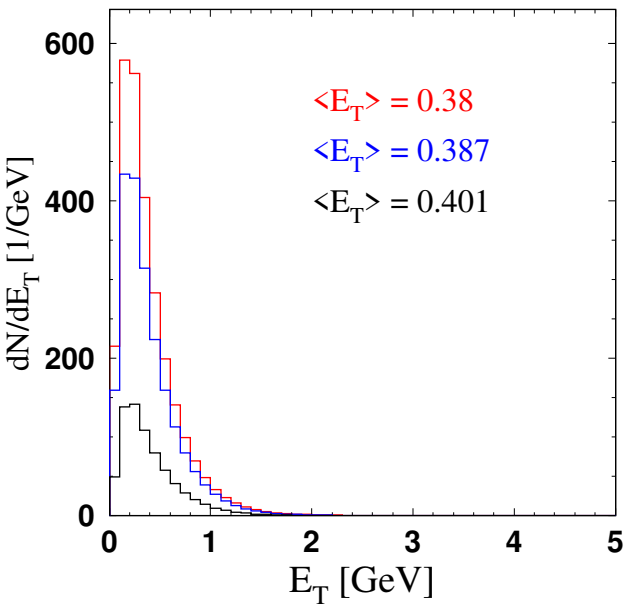


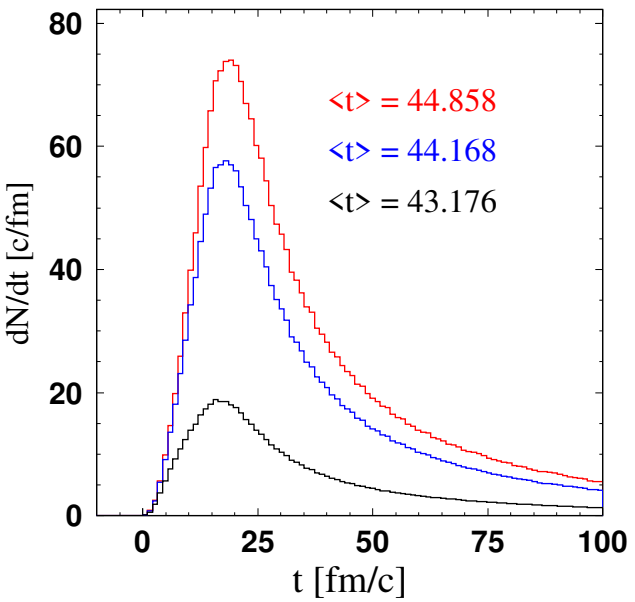

## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 1035.83±0.7233 | 790.309±0.3147 | 258.646±0.077 |
| \|y\|<1.0 | 1853.47±0.9675 | 1417.33±0.4215 | 467.471±0.1035 |
| \|y\|<1.5 | 2360.66±1.0919 | 1812.29±0.4766 | 604.064±0.1177 |
| \|y\|<2.0 | 2606.33±1.1473 | 2008±0.5017 | 676.454±0.1246 |
| 4π | 2710.66±1.1701 | 2096.11±0.5126 | 712.849±0.1279 |

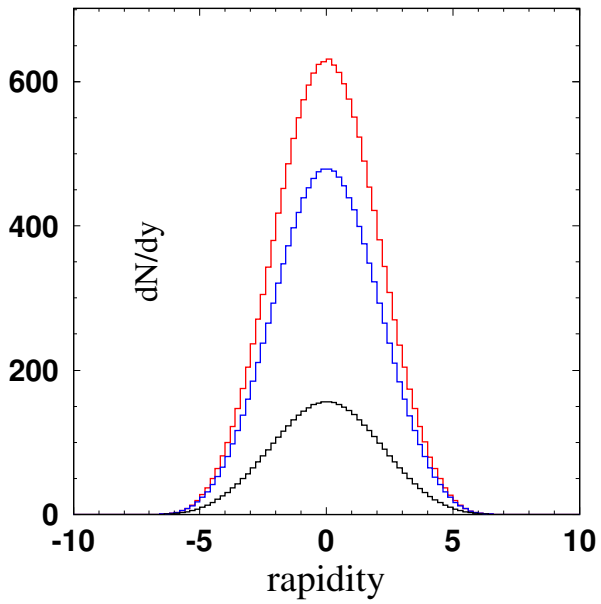


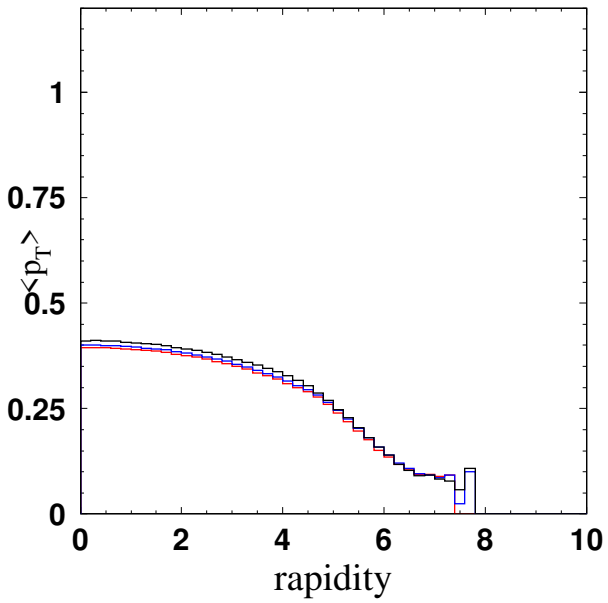



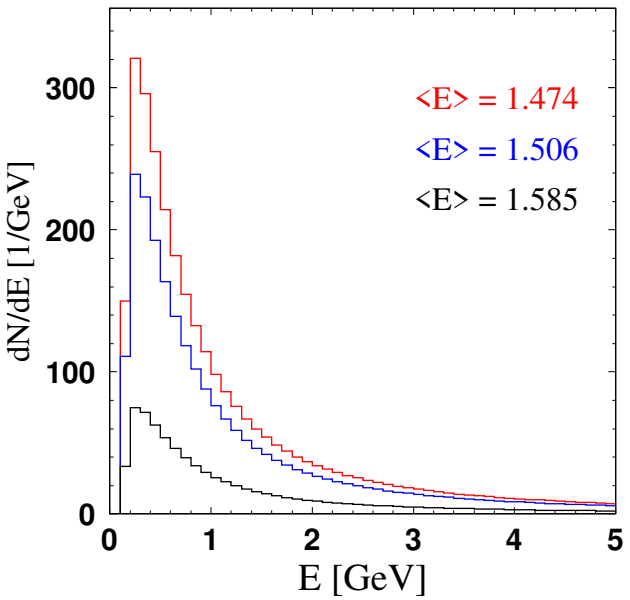
# $\pi^0$

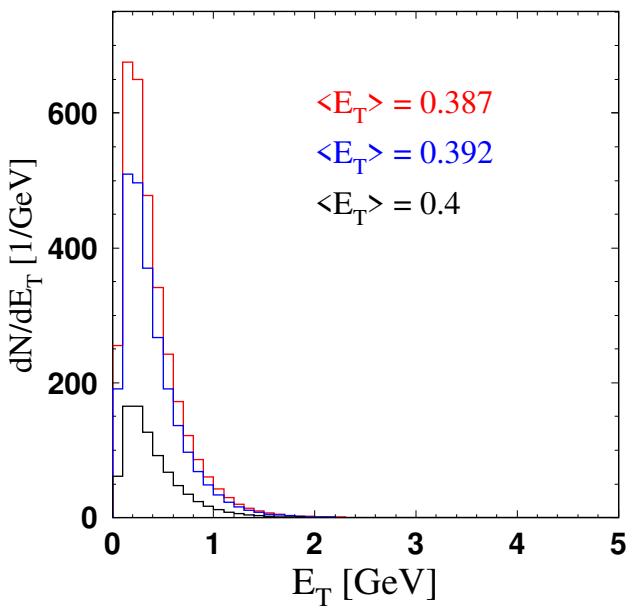


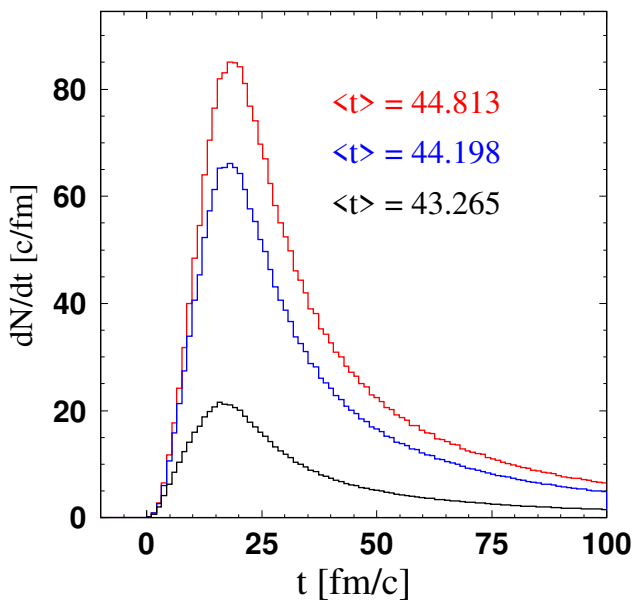

## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 1215.18±0.7834 | 926.327±0.3407 | 301.954±0.0832 |
| \|y\|<1.0 | 2188.82±1.0514 | 1671.19±0.4577 | 548.27±0.1121 |
| \|y\|<1.5 | 2803.67±1.19 | 2147.37±0.5188 | 711.003±0.1277 |
| \|y\|<2.0 | 3102.29±1.2517 | 2383.76±0.5466 | 797.1±0.1352 |
| 4π | 3225.47±1.2763 | 2487.78±0.5584 | 840.097±0.1388 |

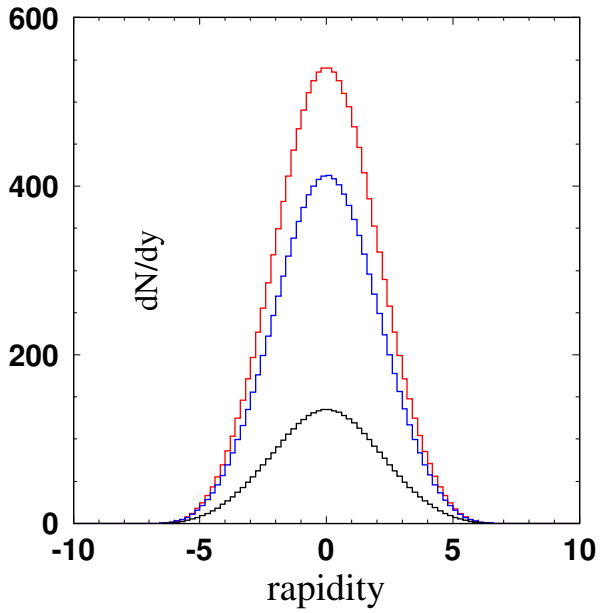


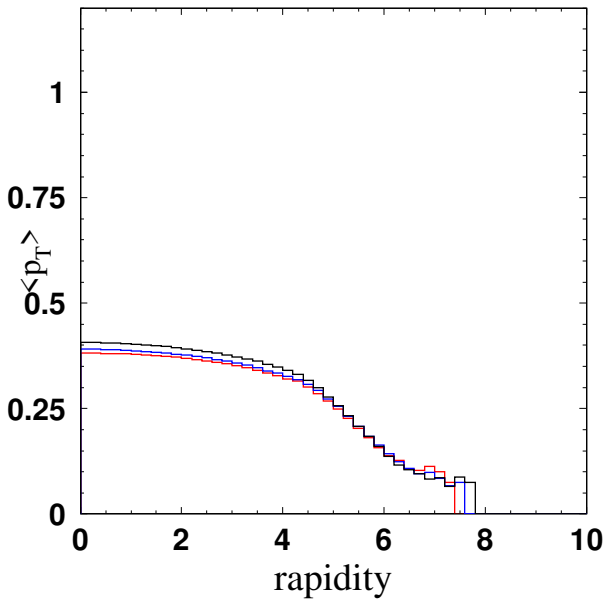



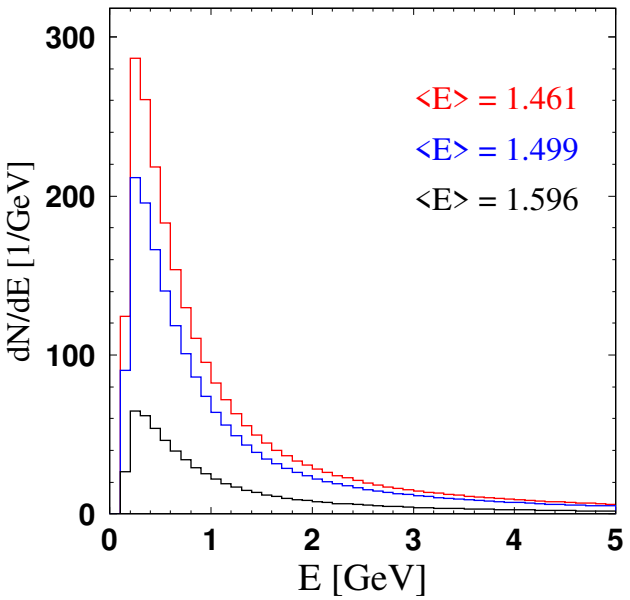
$\pi^-$

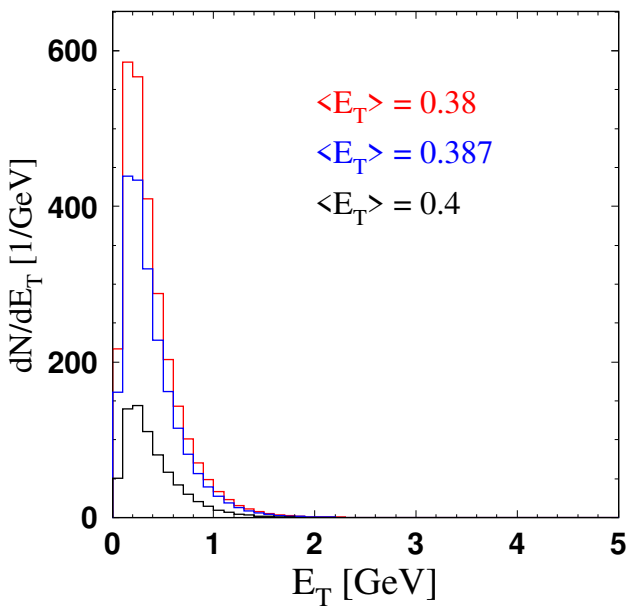


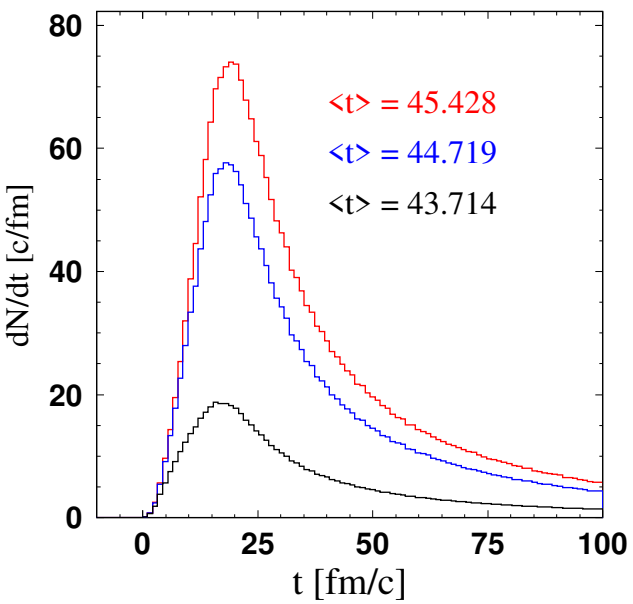

## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 1041.45±0.7252 | 795.446±0.3158 | 260.594±0.0773 |
| \|y\|<1.0 | 1866.04±0.9708 | 1428.55±0.4232 | 471.53±0.104 |
| \|y\|<1.5 | 2381.7±1.0968 | 1829.97±0.4789 | 610.601±0.1183 |
| \|y\|<2.0 | 2634.76±1.1536 | 2031.87±0.5047 | 685.411±0.1254 |
| 4π | 2744.28±1.1773 | 2124.71±0.5161 | 724.255±0.1289 |

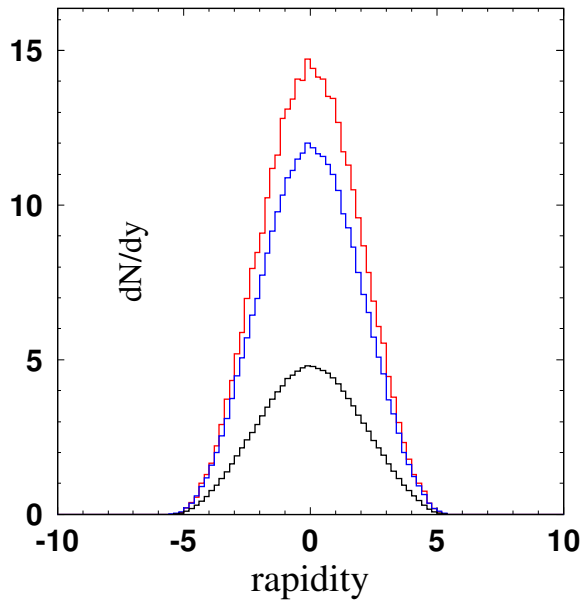


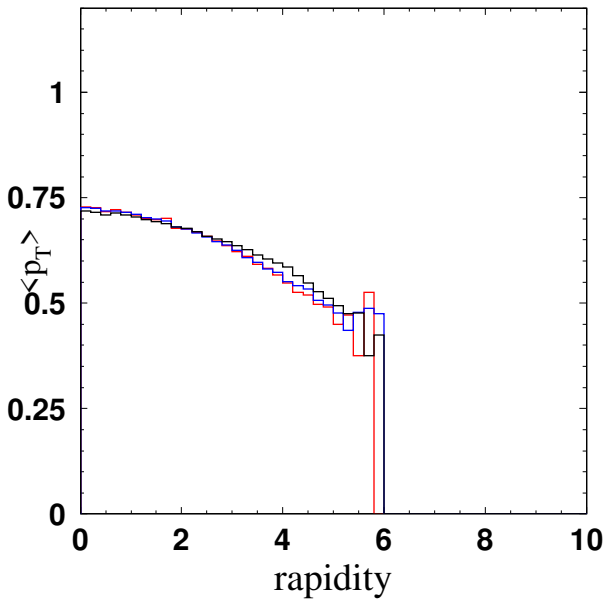



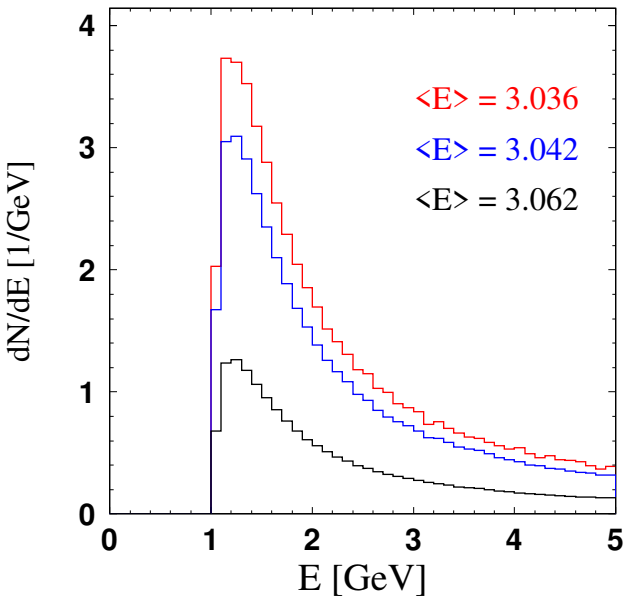
# $\phi_{(1020)}$

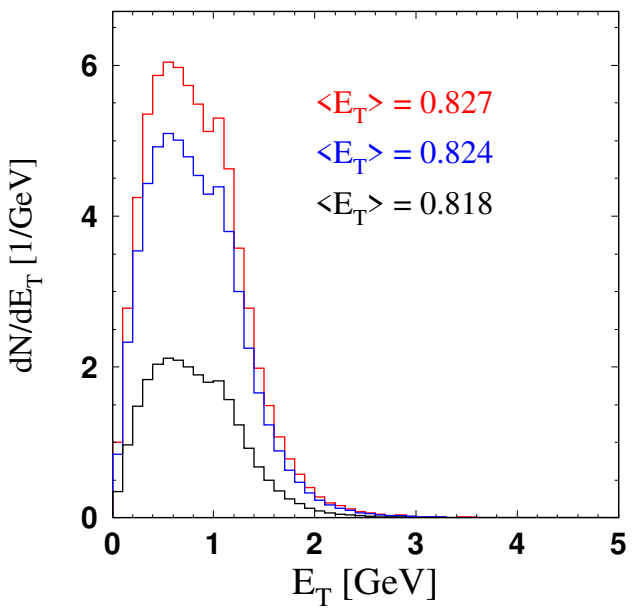


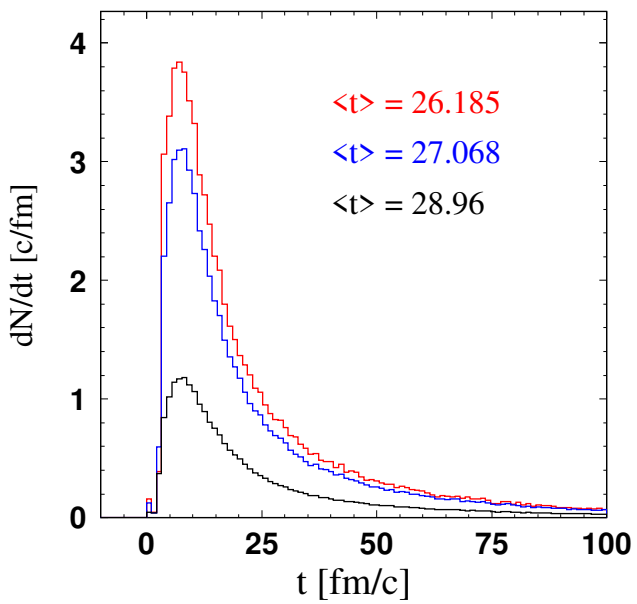

## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 27.7889±0.1185 | 22.9151±0.0536 | 9.2411±0.0146 |
| \|y\|<1.0 | 49.9359±0.1588 | 41.1835±0.0718 | 16.6755±0.0196 |
| \|y\|<1.5 | 63.8248±0.1795 | 52.7189±0.0813 | 21.4966±0.0222 |
| \|y\|<2.0 | 69.8571±0.1878 | 57.9545±0.0852 | 23.8569±0.0234 |
| 4π | 71.3±0.1898 | 59.3258±0.0862 | 24.516±0.0237 |

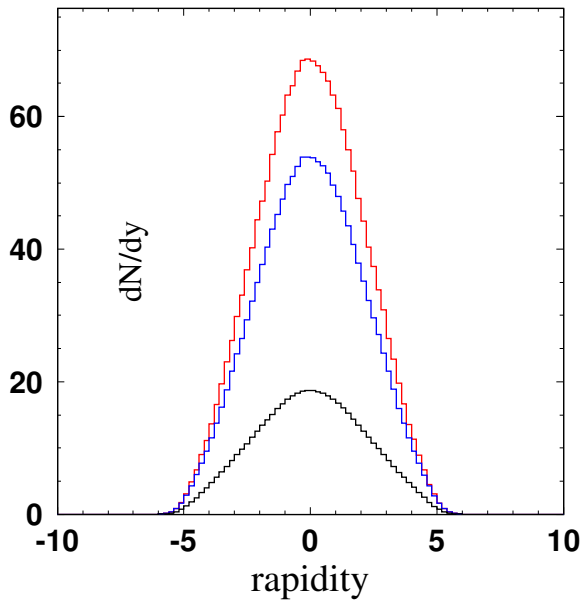


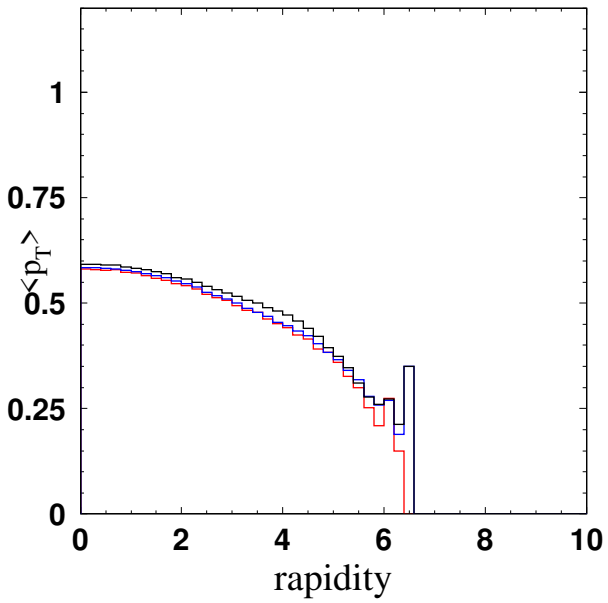



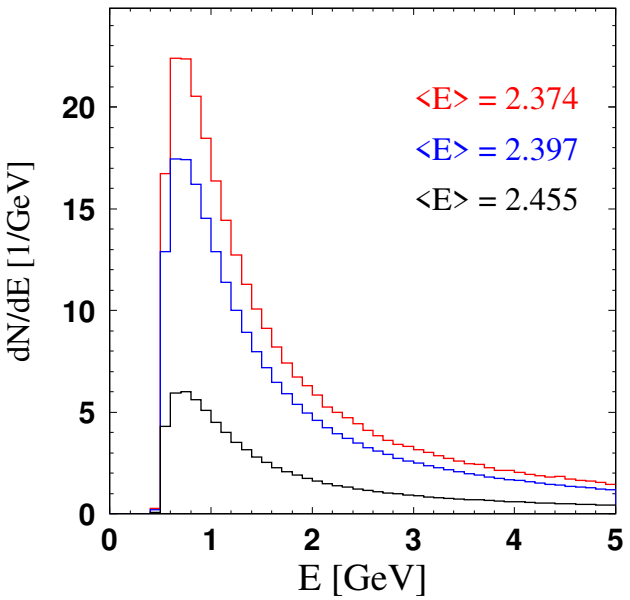
$K^+$

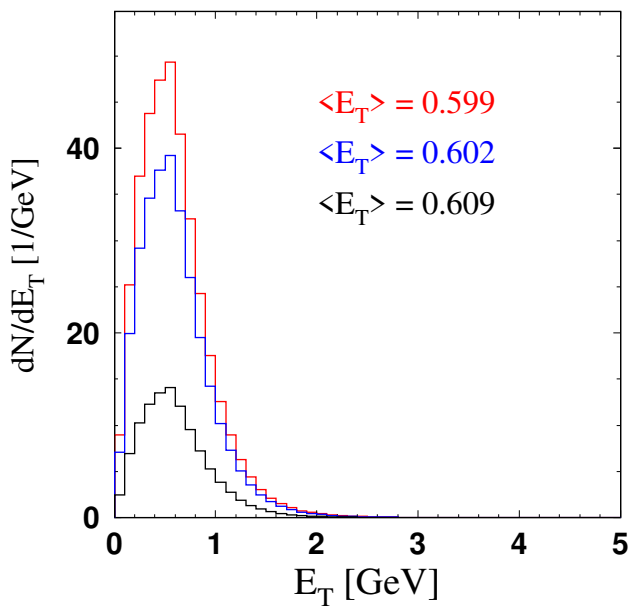


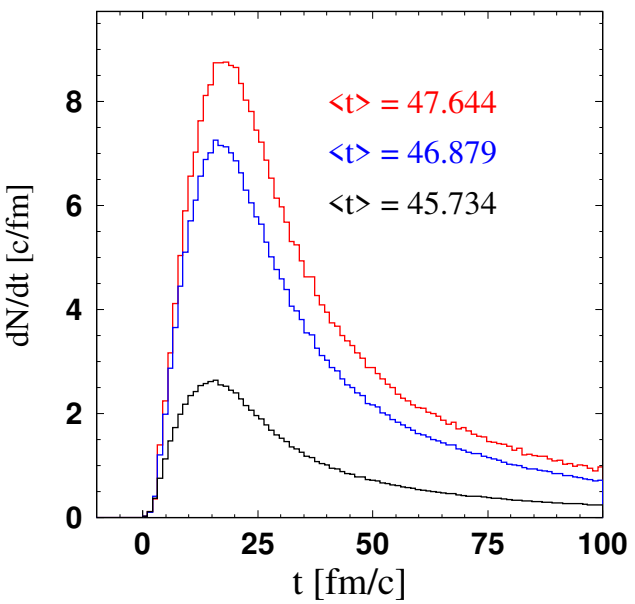

## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 132.619±0.2588 | 104.333±0.1144 | 36.3277±0.0289 |
| \|y\|<1.0 | 241.337±0.3491 | 190.269±0.1544 | 66.6106±0.0391 |
| \|y\|<1.5 | 315.539±0.3992 | 249.419±0.1768 | 88.0984±0.0449 |
| \|y\|<2.0 | 355.343±0.4236 | 282.141±0.1881 | 100.927±0.0481 |
| 4π | 370.505±0.4326 | 295.551±0.1925 | 106.676±0.0495 |

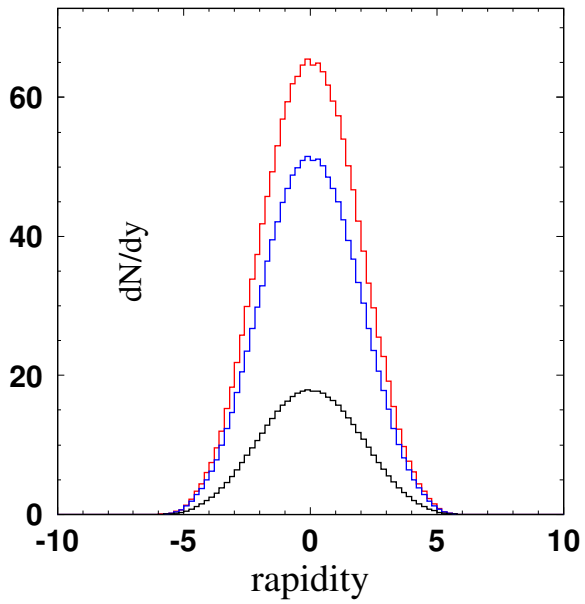


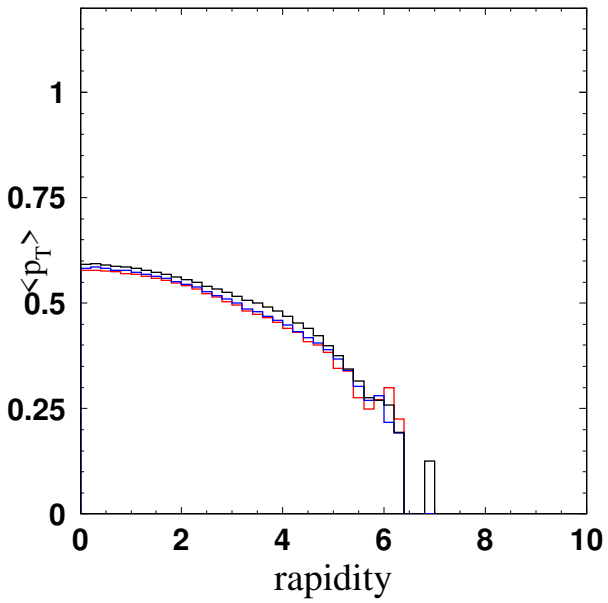



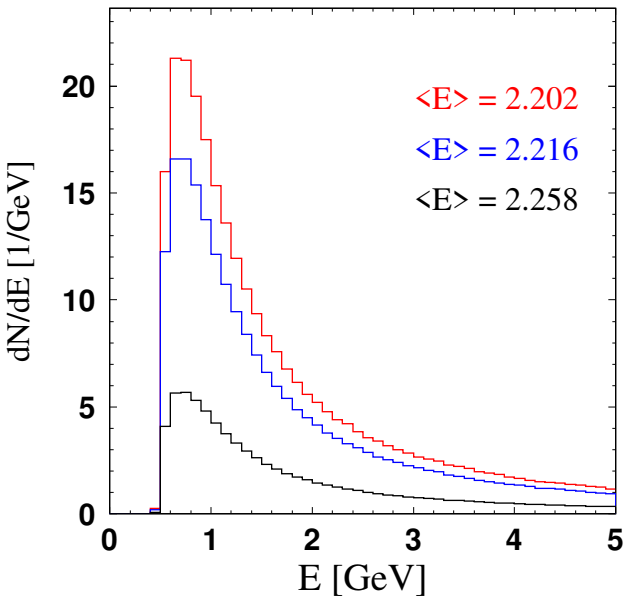
# $K^-$

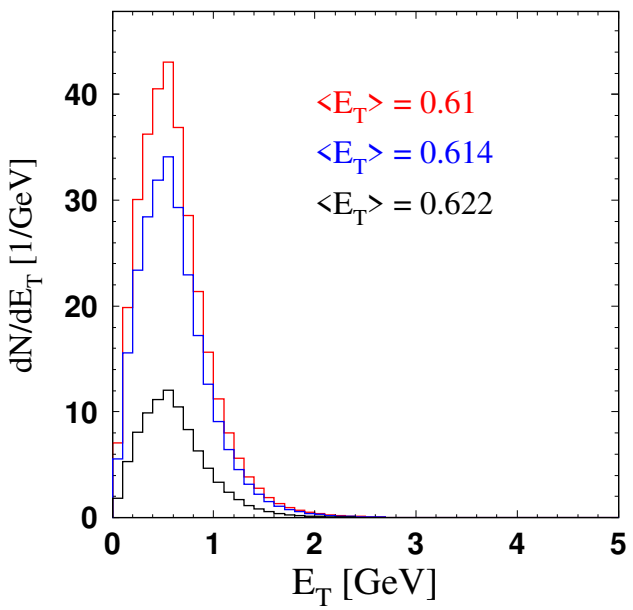


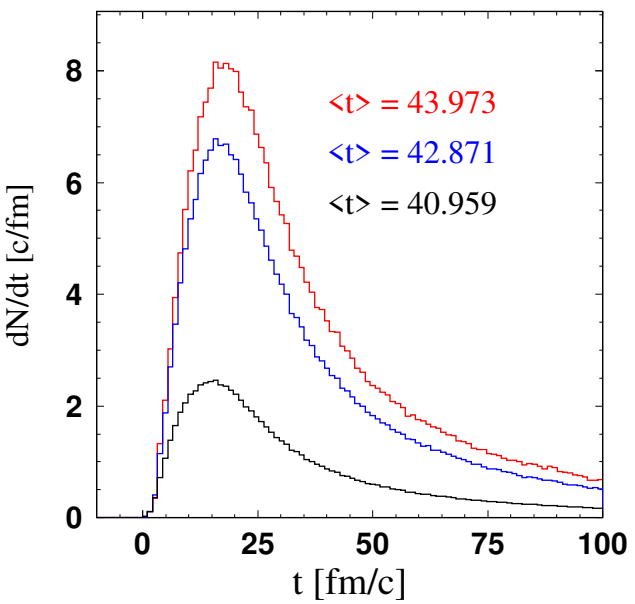

## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 125.807±0.2521 | 99.1307±0.1115 | 34.4866±0.0281 |
| \|y\|<1.0 | 225.235±0.3373 | 177.693±0.1492 | 62.0909±0.0377 |
| \|y\|<1.5 | 284.809±0.3793 | 225.162±0.168 | 79.1811±0.0426 |
| \|y\|<2.0 | 310.175±0.3958 | 245.789±0.1755 | 86.9991±0.0447 |
| 4π | 317.693±0.4006 | 252.213±0.1778 | 89.5704±0.0453 |

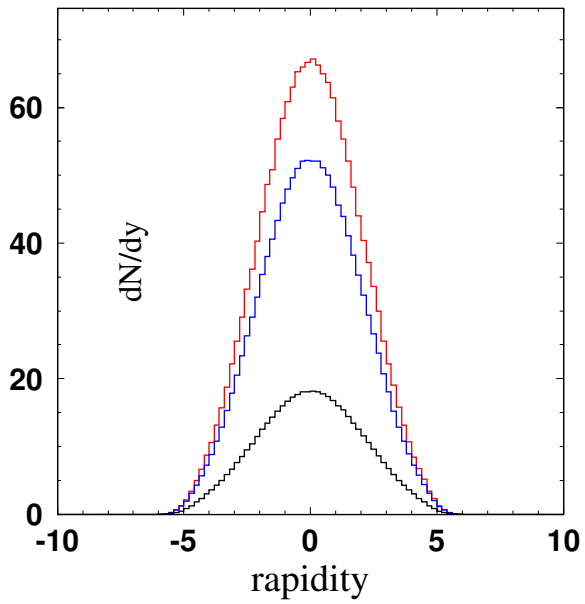


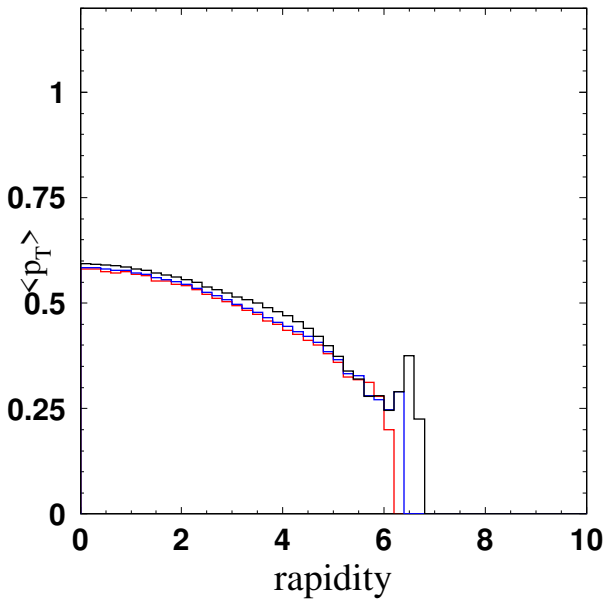



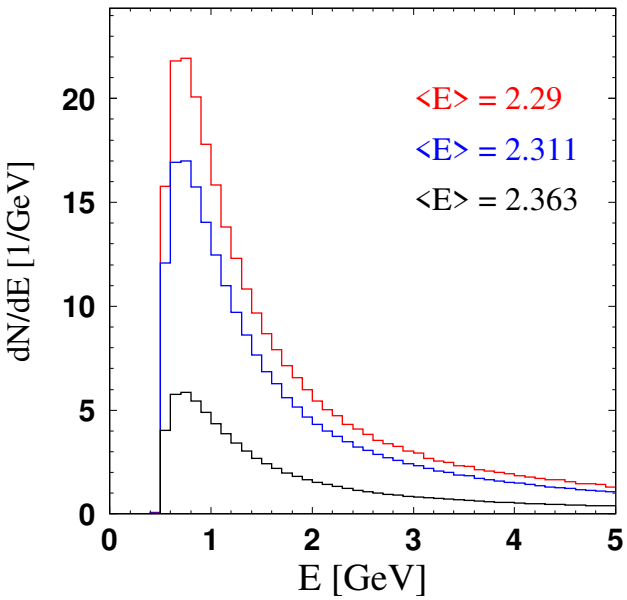
# $K^0_s$

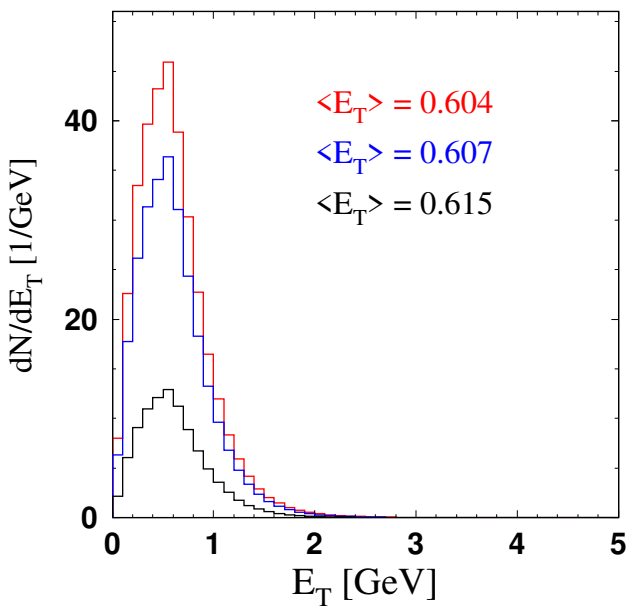


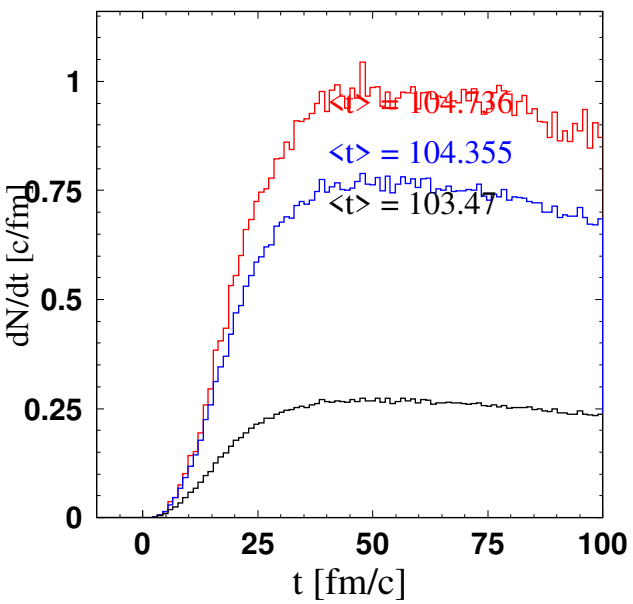

## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 129.025±0.2553 | 101.282±0.1127 | 35.1944±0.0284 |
| \|y\|<1.0 | 232.135±0.3424 | 182.726±0.1513 | 63.856±0.0383 |
| \|y\|<1.5 | 298.318±0.3882 | 235.559±0.1718 | 82.9429±0.0436 |
| \|y\|<2.0 | 330.604±0.4086 | 261.891±0.1812 | 93.1498±0.0462 |
| 4π | 341.963±0.4156 | 271.735±0.1846 | 97.2536±0.0472 |

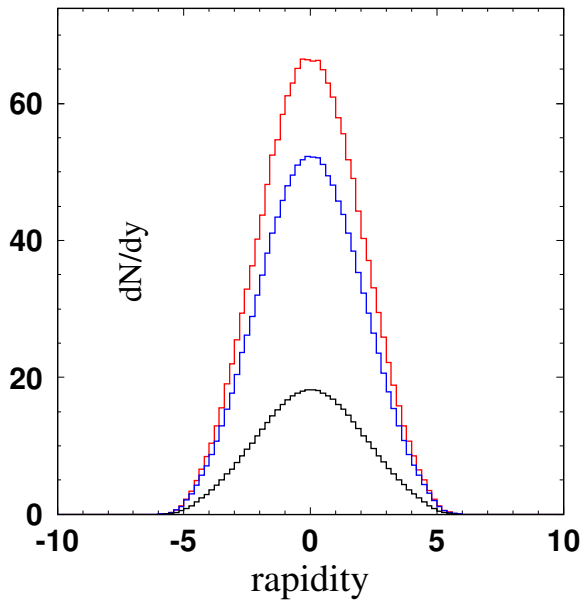


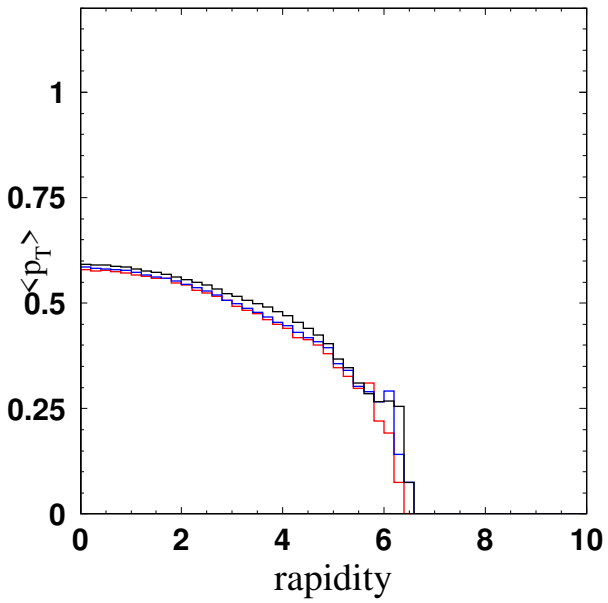



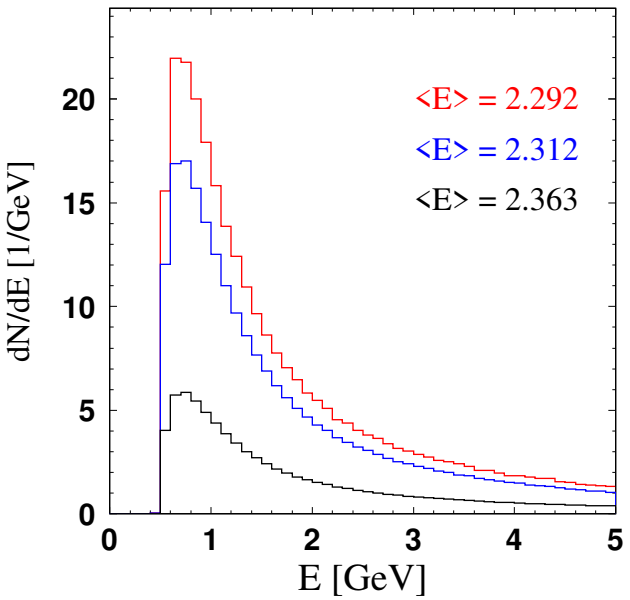
# $K^0_L$

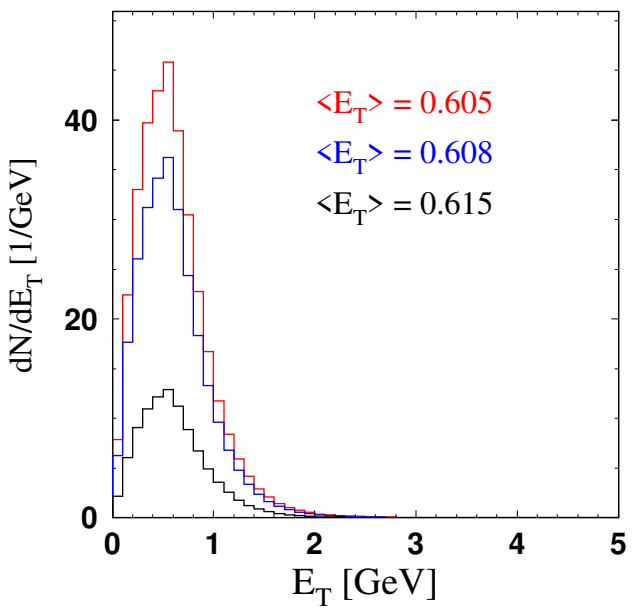


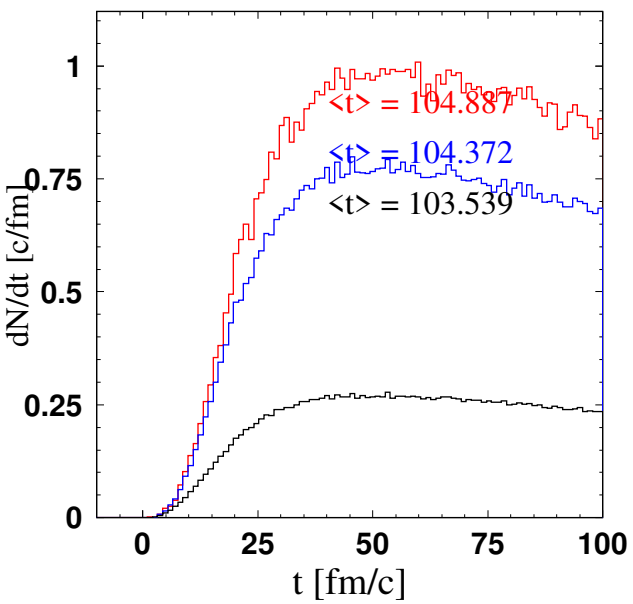

## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 128.664±0.2549 | 101.112±0.1126 | 35.1649±0.0284 |
| \|y\|<1.0 | 231.85±0.3422 | 182.64±0.1513 | 63.8238±0.0383 |
| \|y\|<1.5 | 297.834±0.3878 | 235.329±0.1717 | 82.8929±0.0436 |
| \|y\|<2.0 | 329.918±0.4082 | 261.568±0.1811 | 93.0752±0.0462 |
| 4π | 341.094±0.4151 | 271.353±0.1844 | 97.1749±0.0472 |

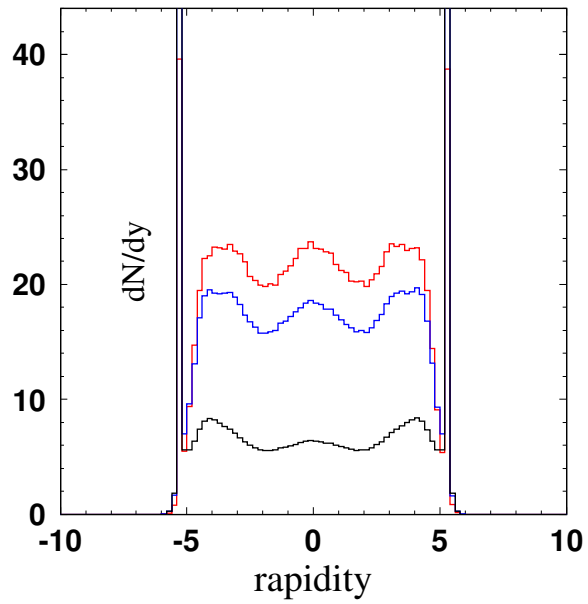


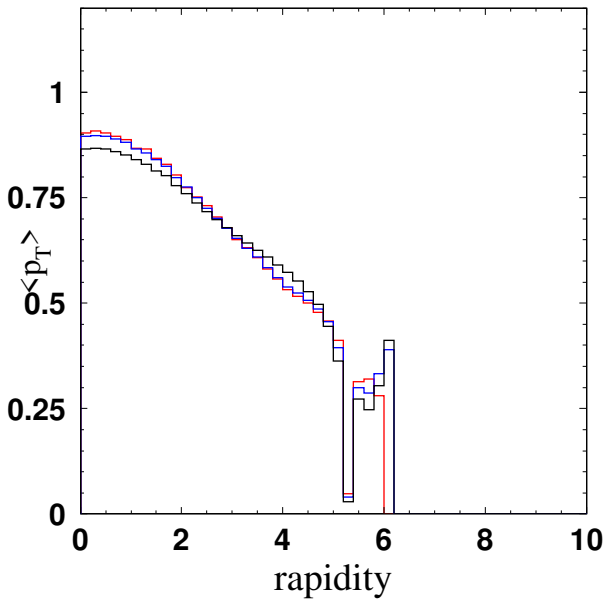



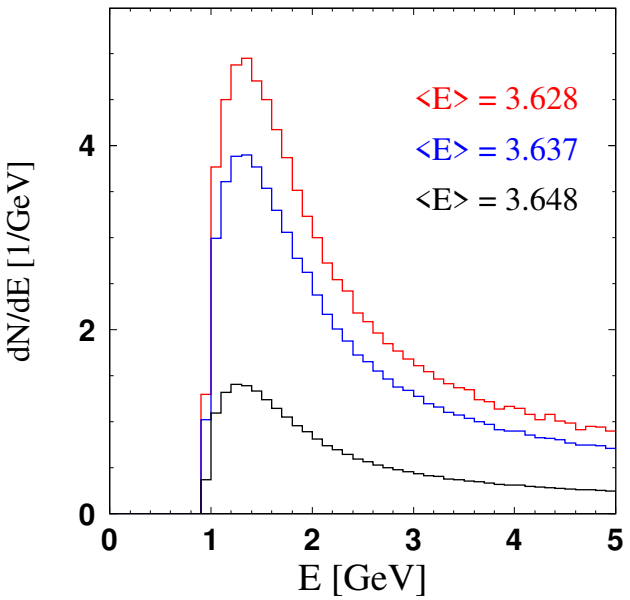
p

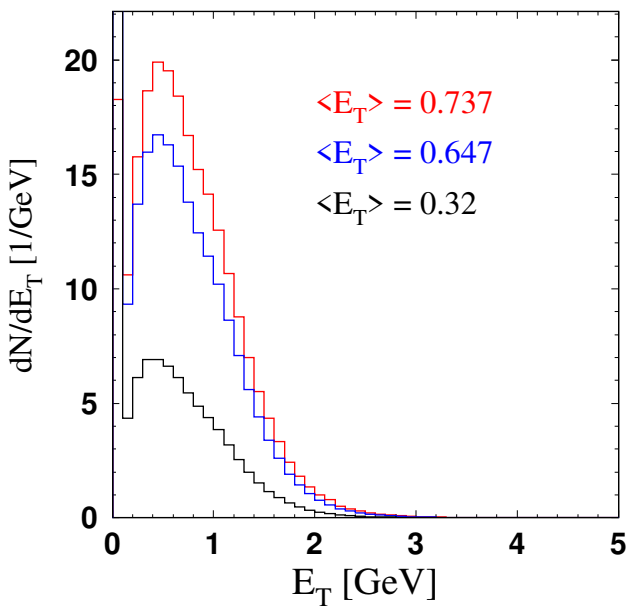


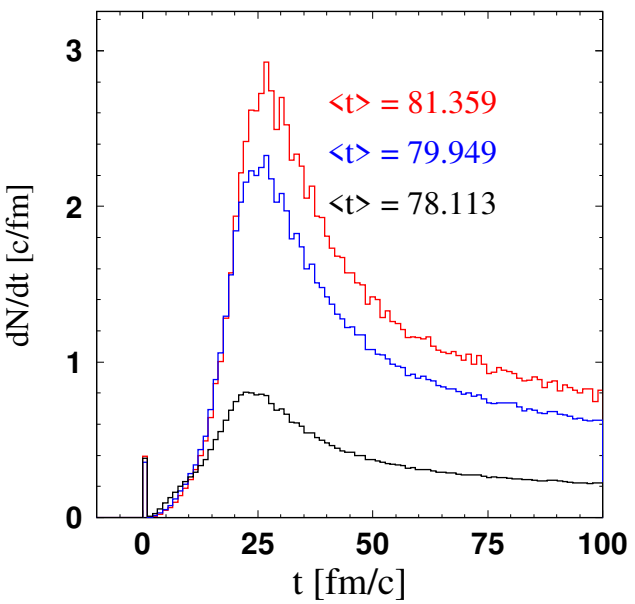

## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 45.4722±0.1515 | 35.8829±0.0671 | 12.437±0.0169 |
| \|y\|<1.0 | 86.4616±0.209 | 68.3951±0.0926 | 23.8227±0.0234 |
| \|y\|<1.5 | 128.701±0.255 | 102.191±0.1132 | 35.9994±0.0287 |
| \|y\|<2.0 | 175.161±0.2974 | 140.593±0.1328 | 51.3461±0.0343 |
| 4π | 228.705±0.3399 | 213.397±0.1635 | 177.105±0.0637 |

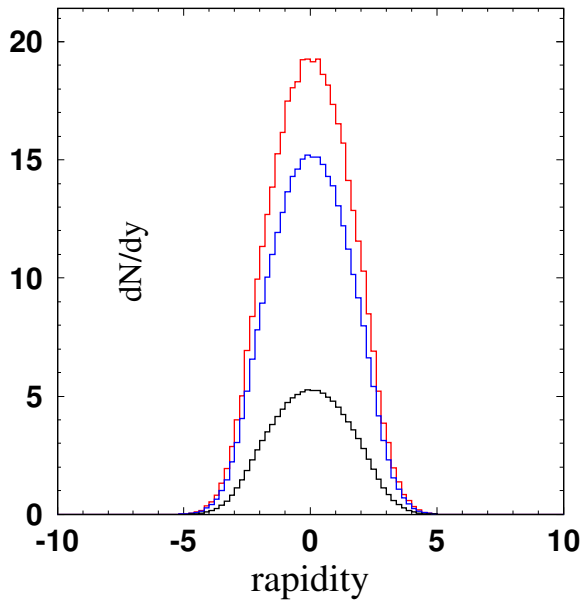


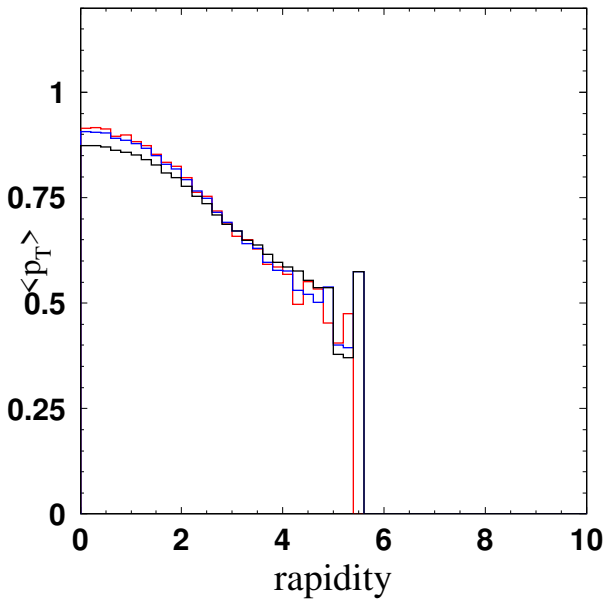



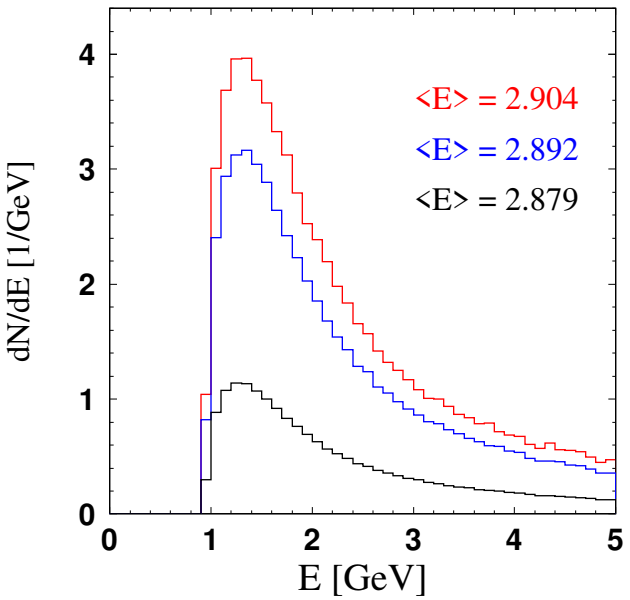
# $\bar{p}$

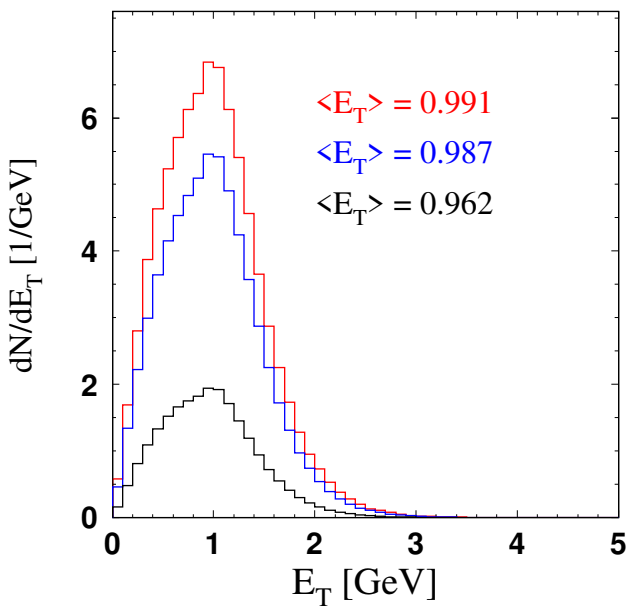


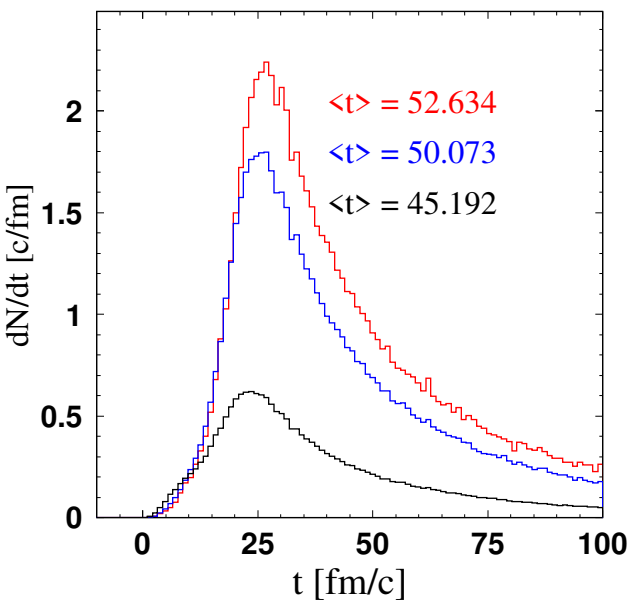

## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 36.9687±0.1366 | 29.2112±0.0605 | 10.1088±0.0152 |
| \|y\|<1.0 | 64.9843±0.1812 | 51.316±0.0802 | 17.8051±0.0202 |
| \|y\|<1.5 | 78.7869±0.1995 | 62.1102±0.0882 | 21.63±0.0223 |
| \|y\|<2.0 | 81.8379±0.2033 | 64.4687±0.0899 | 22.5206±0.0227 |
| 4π | 82.1056±0.2036 | 64.6786±0.09 | 22.6041±0.0228 |

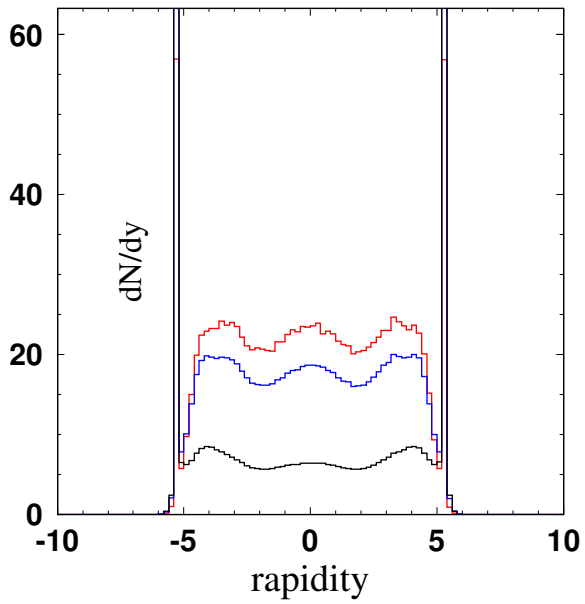


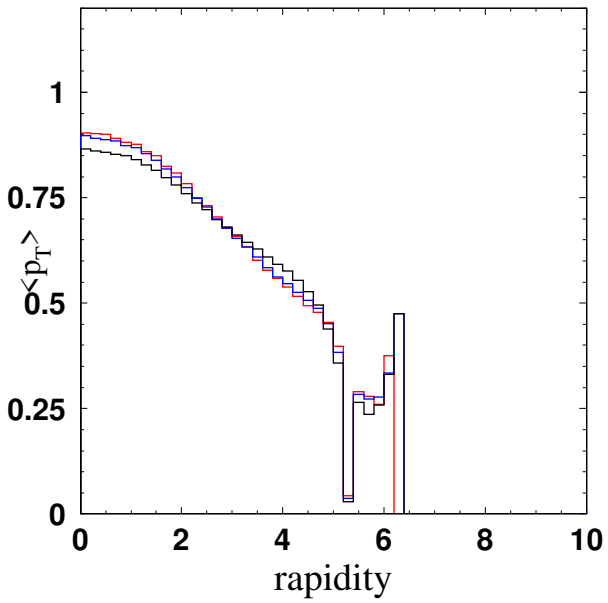



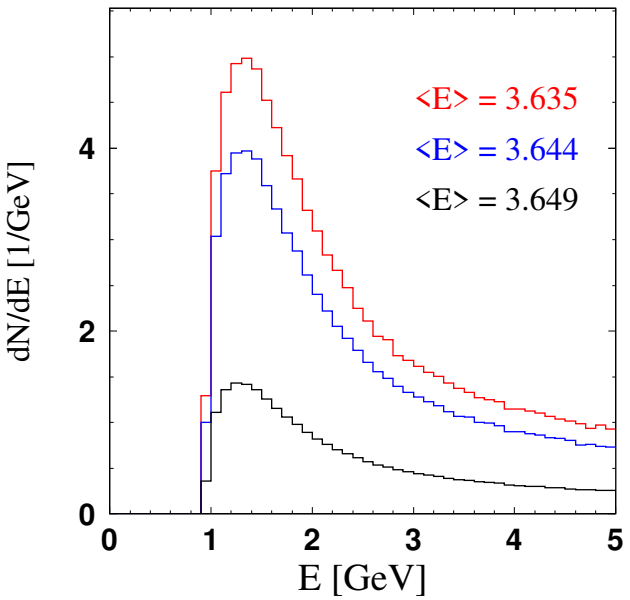
n

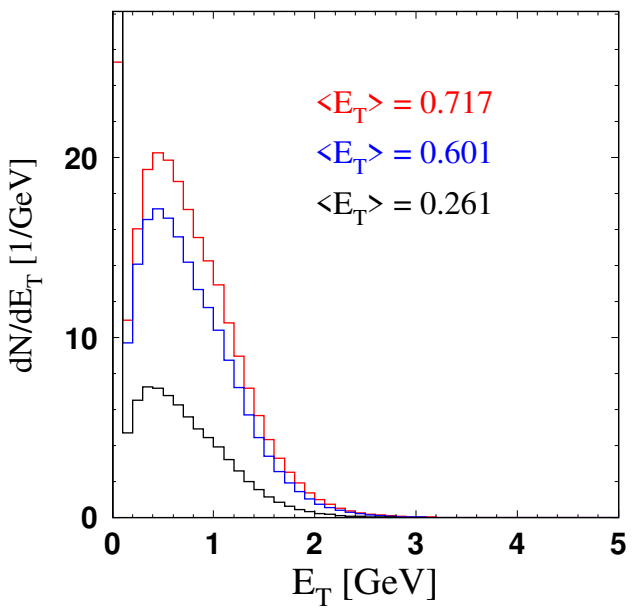


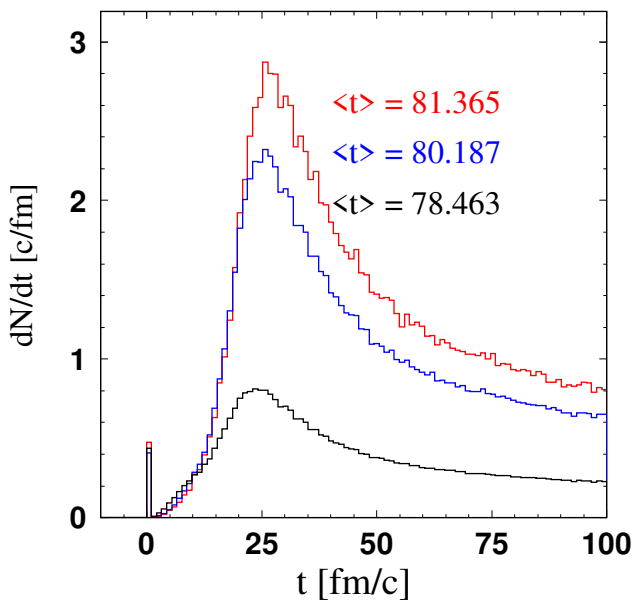

## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 46.1955±0.1527 | 36.4578±0.0676 | 12.6069±0.017 |
| \|y\|<1.0 | 88.0061±0.2108 | 69.4357±0.0933 | 24.1628±0.0235 |
| \|y\|<1.5 | 131.224±0.2574 | 103.989±0.1142 | 36.5441±0.0289 |
| \|y\|<2.0 | 178.58±0.3003 | 143.133±0.1339 | 52.1365±0.0346 |
| 4π | 240.265±0.3483 | 235.461±0.1718 | 232.139±0.073 |

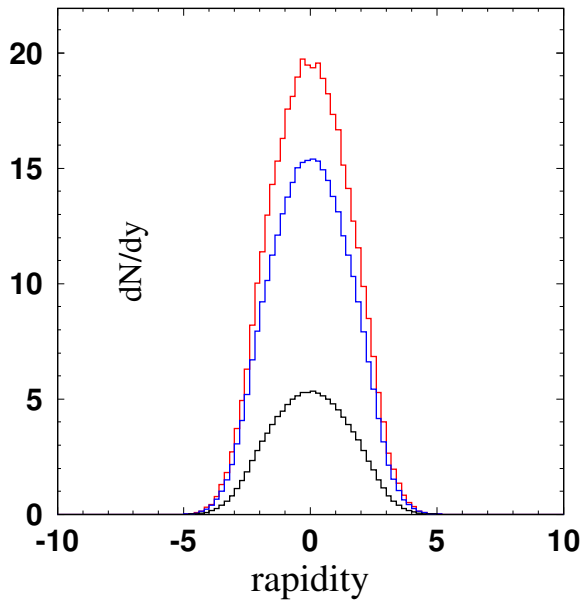


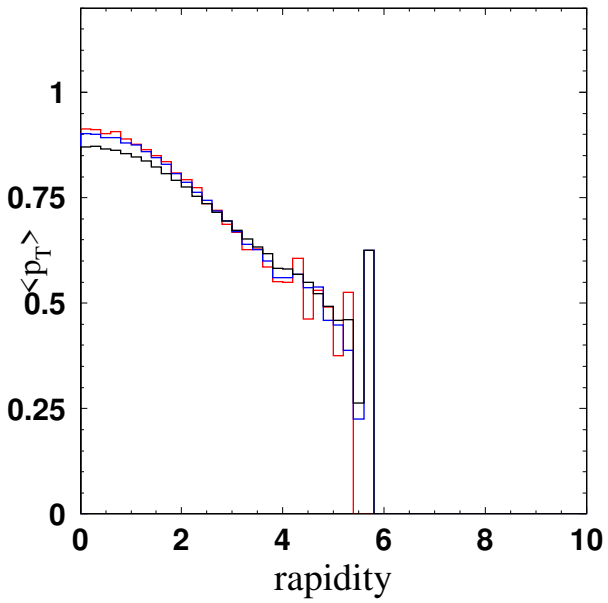



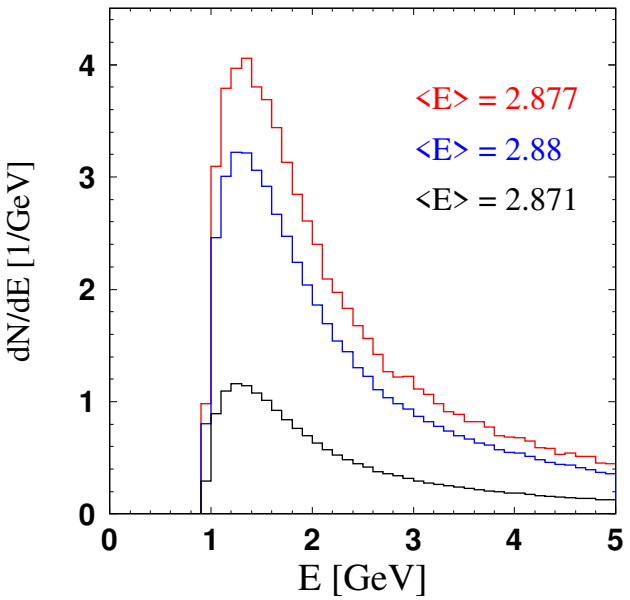
# $\bar{n}$

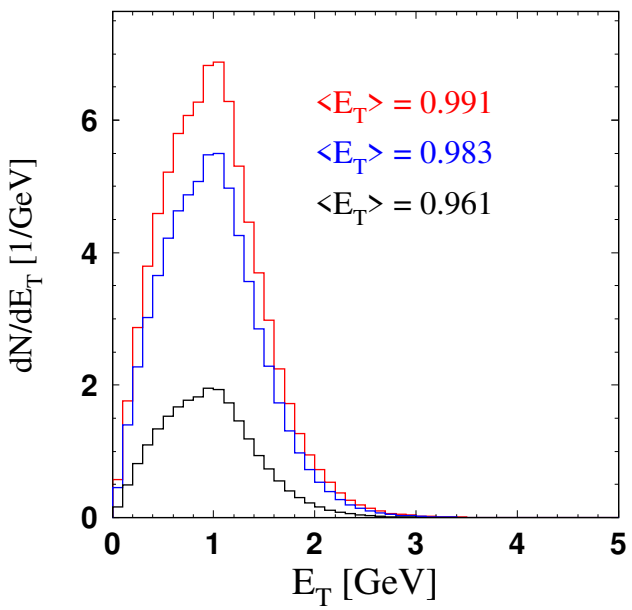


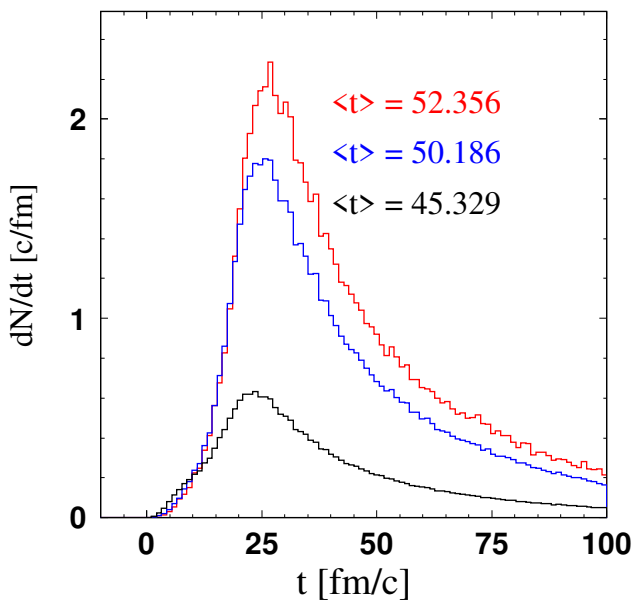

## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 37.4475±0.1375 | 29.5251±0.0608 | 10.1961±0.0153 |
| \|y\|<1.0 | 65.5384±0.1819 | 51.8549±0.0806 | 17.9544±0.0203 |
| \|y\|<1.5 | 79.0672±0.1998 | 62.6874±0.0886 | 21.7873±0.0224 |
| \|y\|<2.0 | 81.9283±0.2034 | 64.9826±0.0903 | 22.6566±0.0228 |
| 4π | 82.1697±0.2037 | 65.1821±0.0904 | 22.736±0.0228 |



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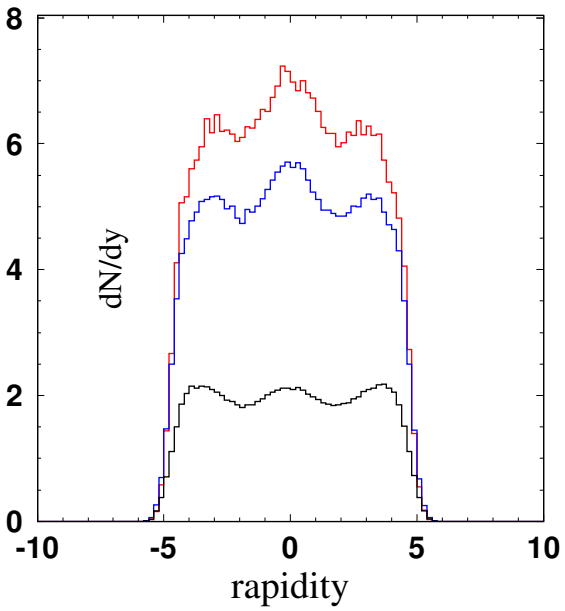
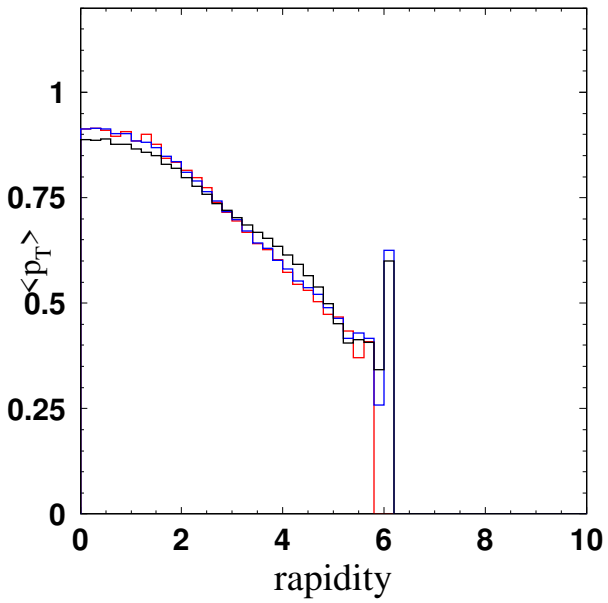
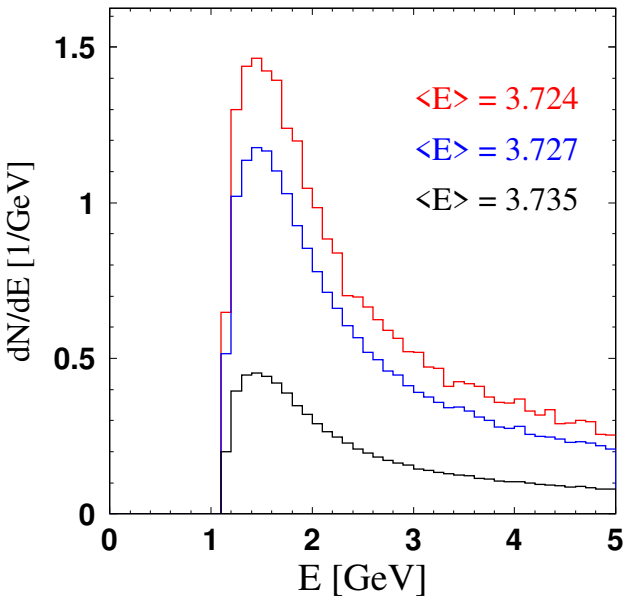
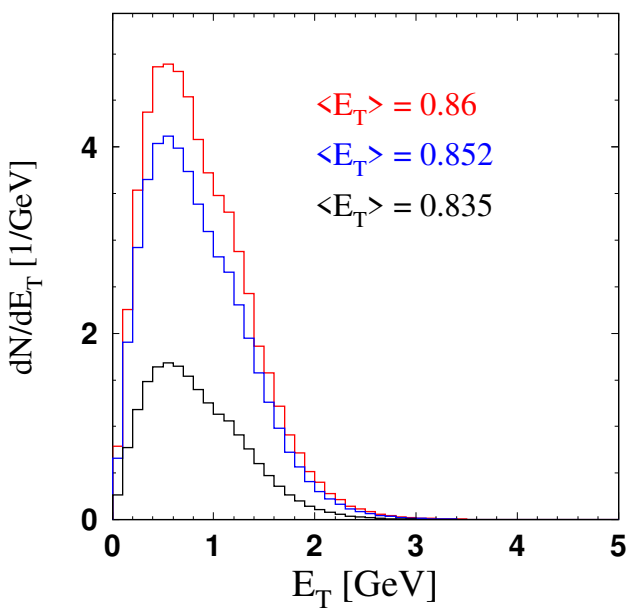


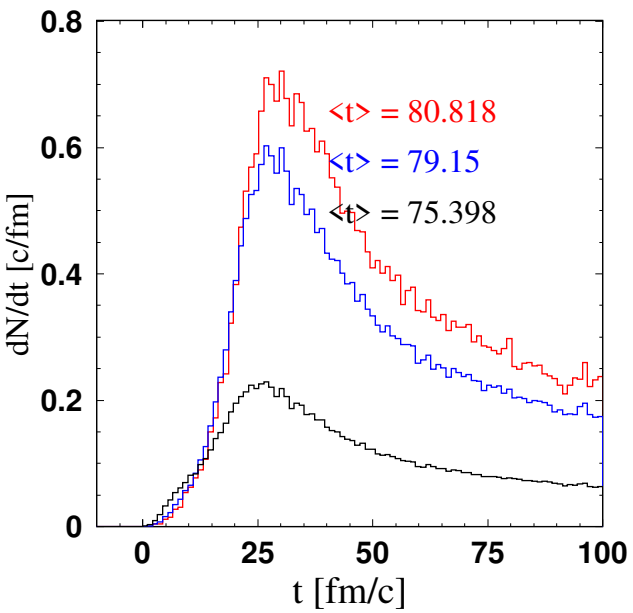

## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 13.7808±0.0834 | 11.0338±0.0372 | 4.1359±0.0097 |
| \|y\|<1.0 | 26.3035±0.1153 | 20.9306±0.0512 | 7.8819±0.0134 |
| \|y\|<1.5 | 38.6859±0.1398 | 30.9276±0.0623 | 11.7784±0.0164 |
| \|y\|<2.0 | 50.5985±0.1599 | 40.9539±0.0716 | 16.0419±0.0192 |
| 4π | 58.2394±0.1715 | 47.8903±0.0775 | 19.1648±0.021 |



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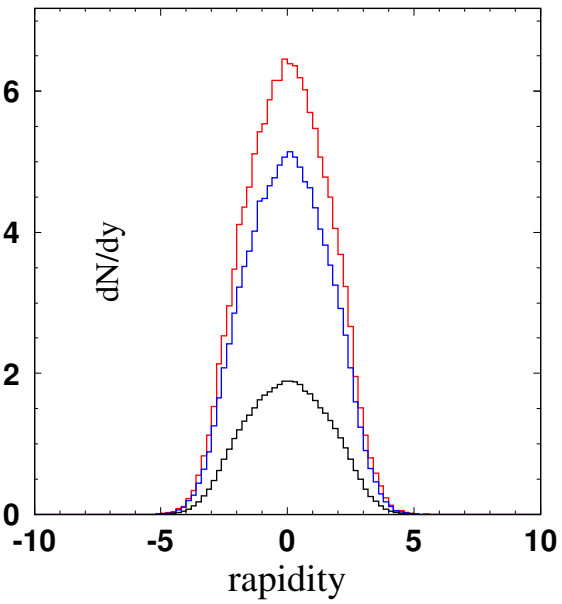
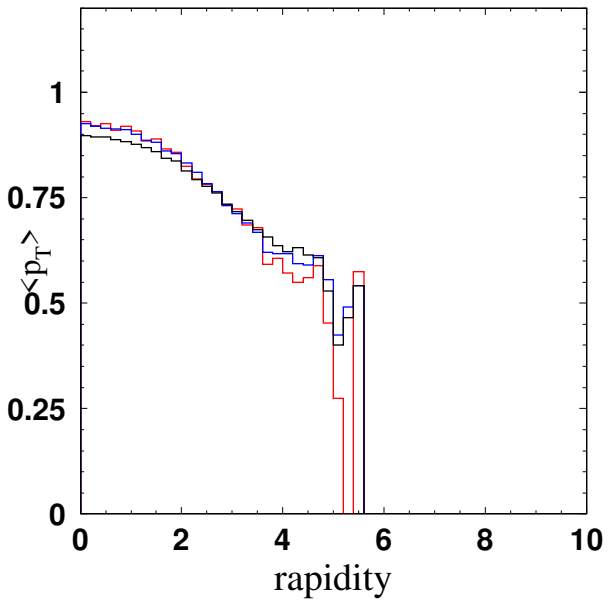
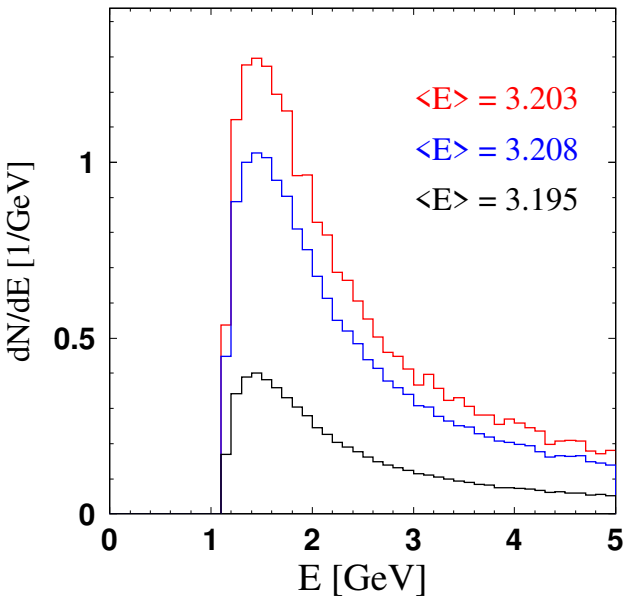
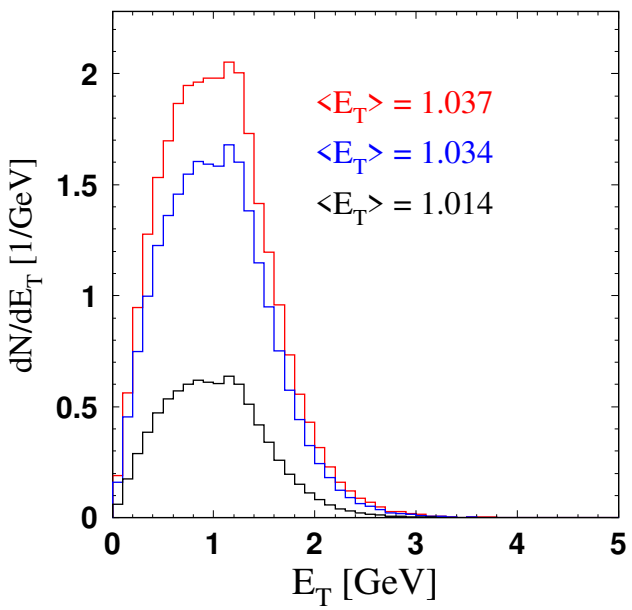


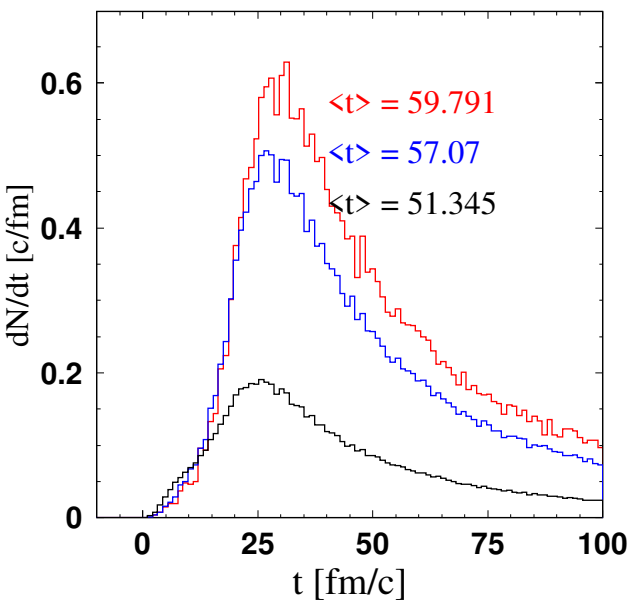

## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 12.1712±0.0784 | 9.6835±0.0348 | 3.5997±0.0091 |
| \|y\|<1.0 | 21.6763±0.1046 | 17.2696±0.0465 | 6.435±0.0121 |
| \|y\|<1.5 | 26.8116±0.1164 | 21.3942±0.0518 | 7.9988±0.0135 |
| \|y\|<2.0 | 28.053±0.119 | 22.3787±0.053 | 8.3958±0.0139 |
| 4π | 28.1586±0.1193 | 22.4718±0.0531 | 8.4358±0.0139 |



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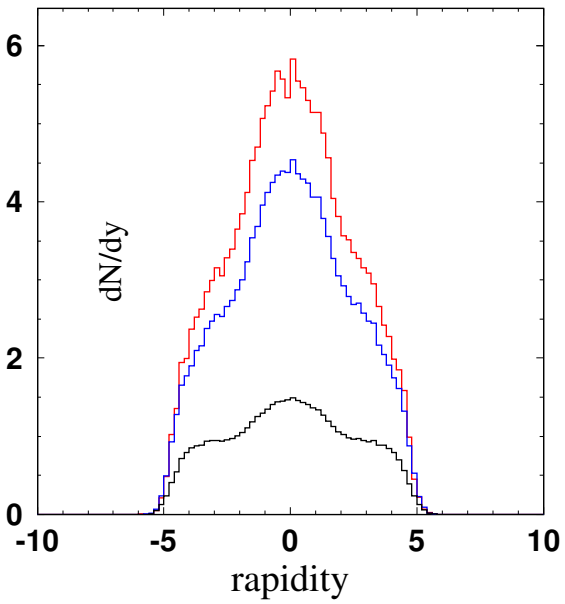
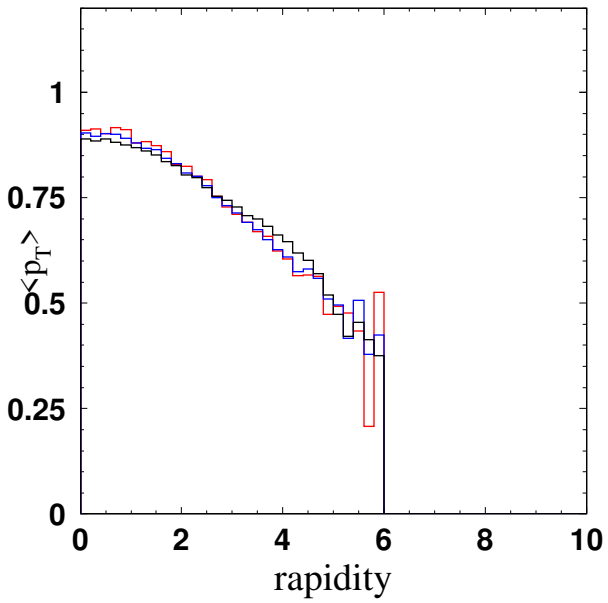
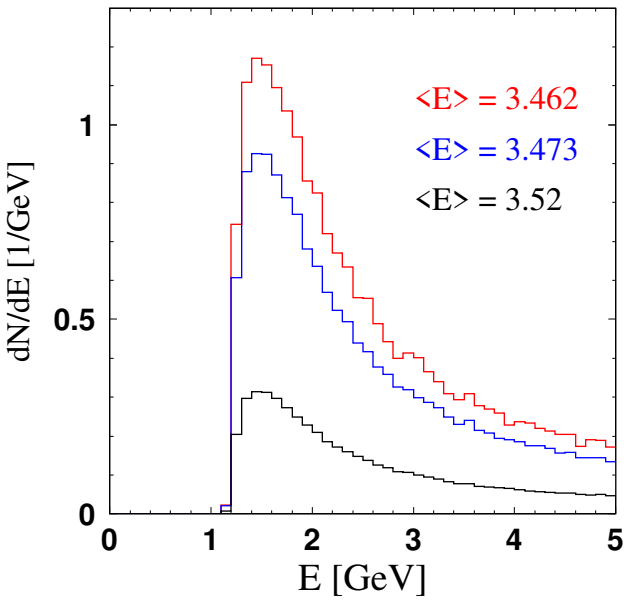
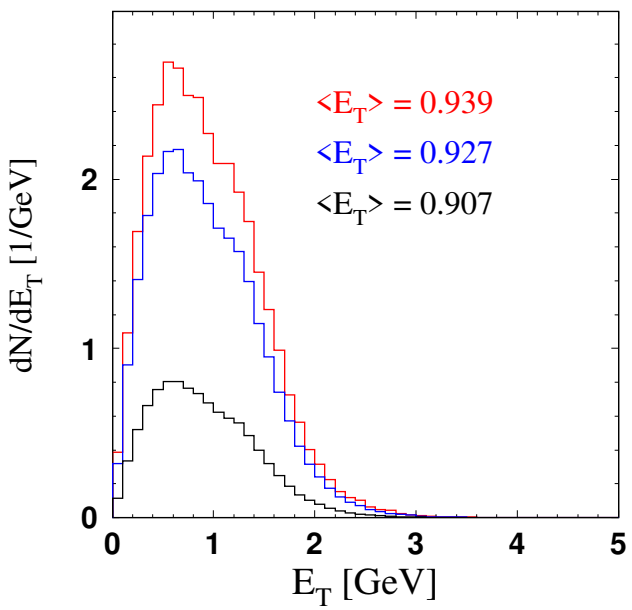


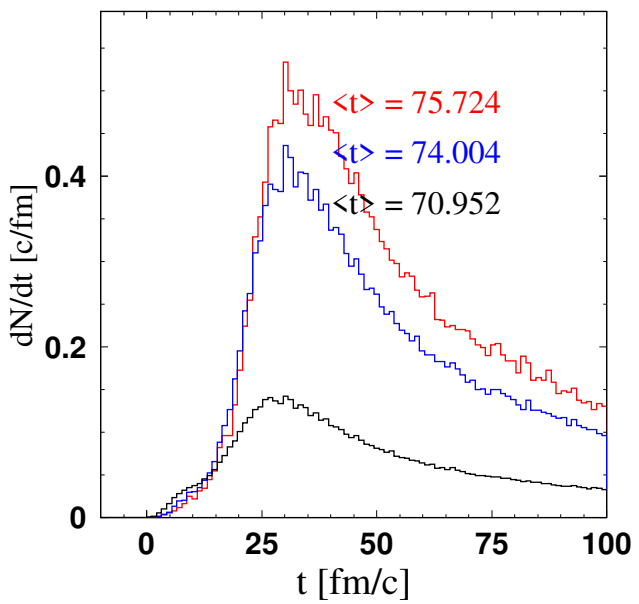

## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 10.9035±0.0742 | 8.5971±0.0328 | 2.8531±0.0081 |
| \|y\|<1.0 | 19.8485±0.1001 | 15.6295±0.0443 | 5.2281±0.0109 |
| \|y\|<1.5 | 26.5278±0.1157 | 21.0406±0.0514 | 7.1654±0.0128 |
| \|y\|<2.0 | 31.8823±0.1269 | 25.4549±0.0565 | 8.9606±0.0143 |
| 4π | 34.7308±0.1324 | 28.0307±0.0593 | 10.112±0.0152 |



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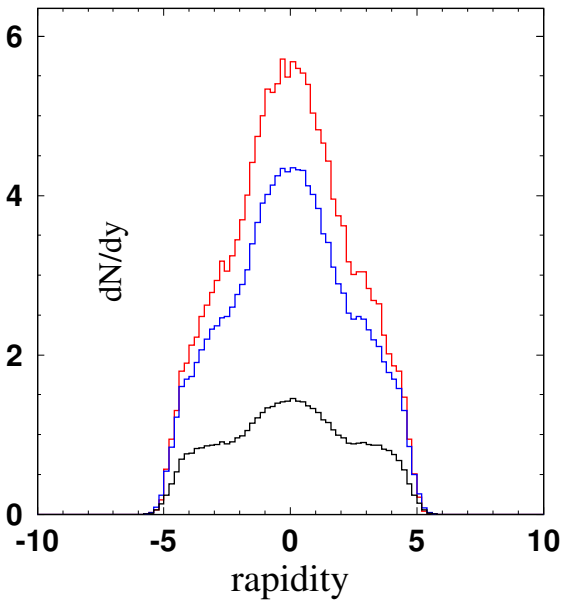
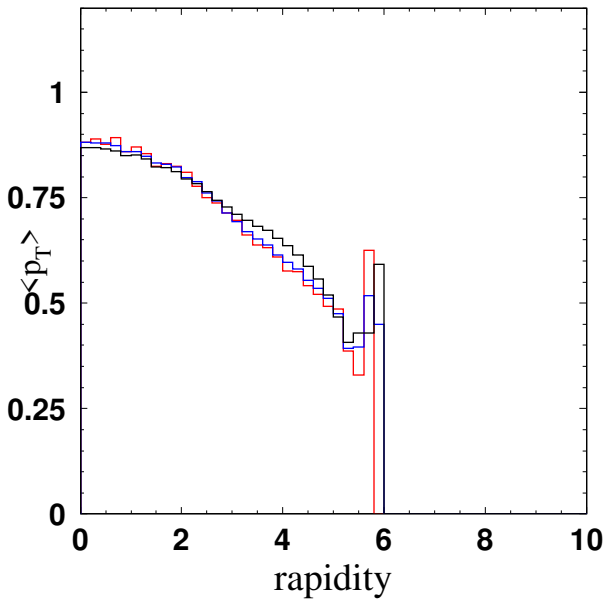
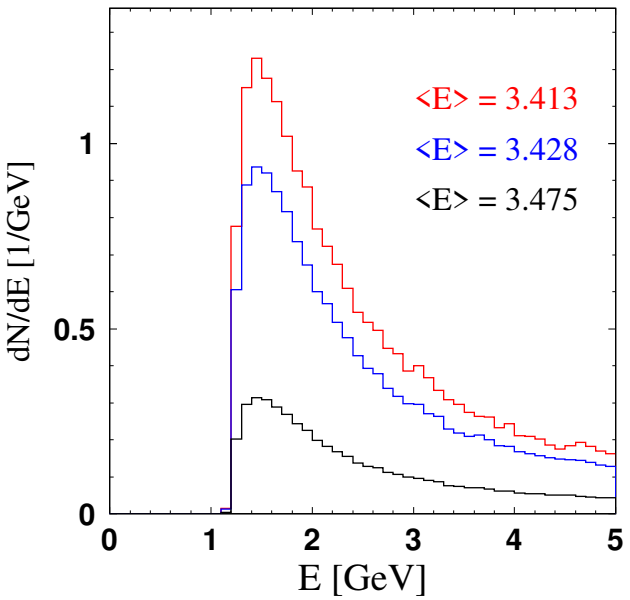
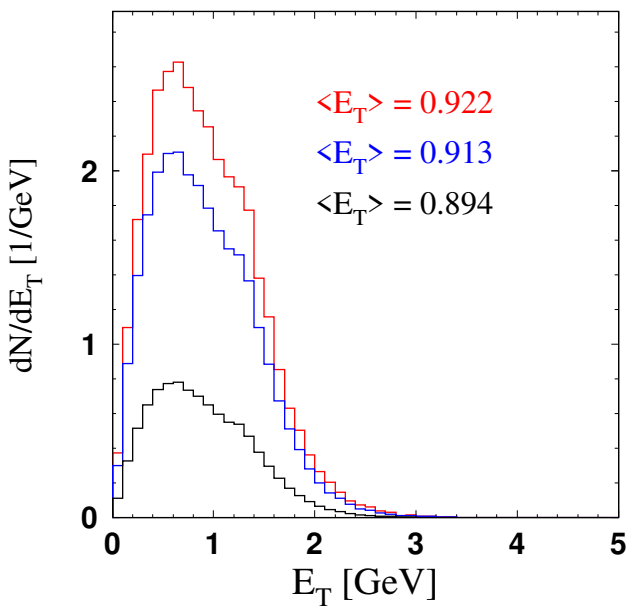


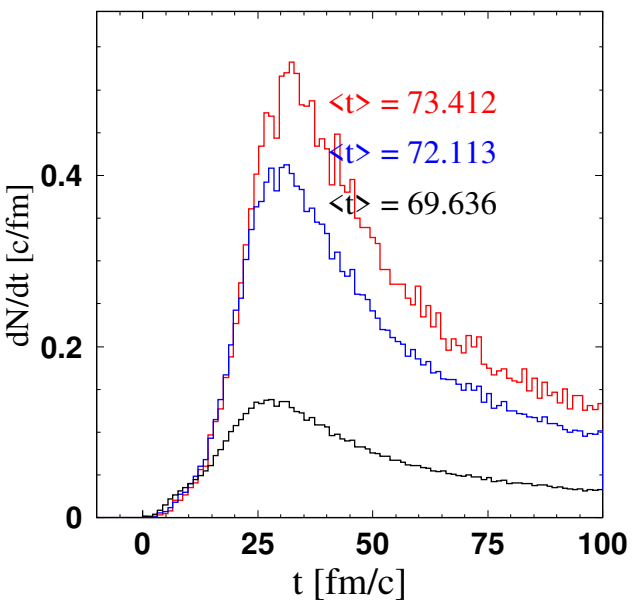

## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 10.898±0.0742 | 8.4306±0.0325 | 2.7771±0.008 |
| \|y\|<1.0 | 19.5929±0.0995 | 15.1657±0.0436 | 5.0448±0.0108 |
| \|y\|<1.5 | 25.9424±0.1145 | 20.2397±0.0504 | 6.8576±0.0125 |
| \|y\|<2.0 | 30.8727±0.1249 | 24.3438±0.0552 | 8.5343±0.014 |
| 4π | 33.597±0.1303 | 26.8549±0.058 | 9.658±0.0149 |



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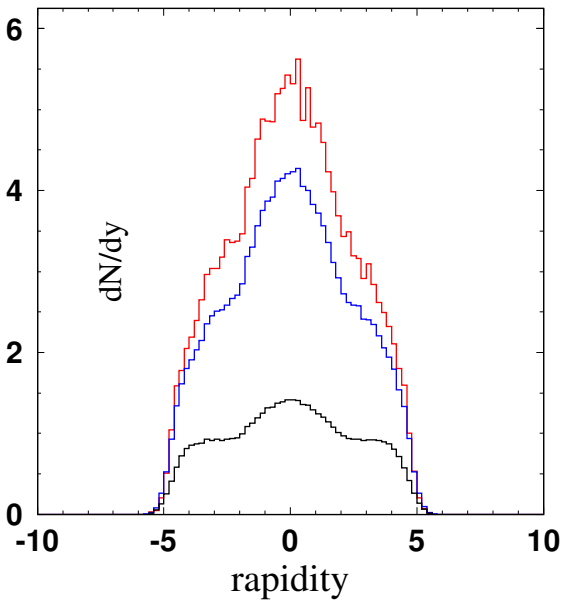
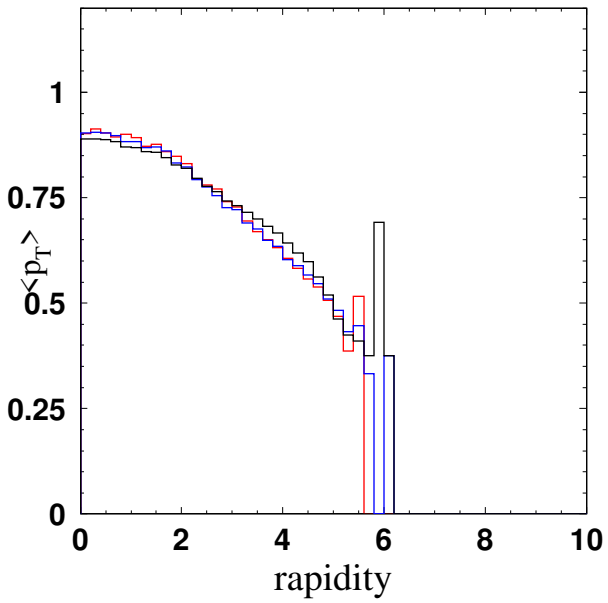
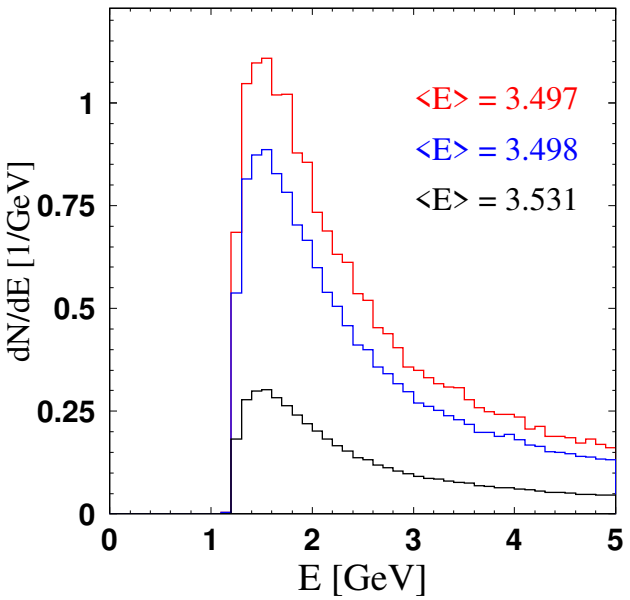
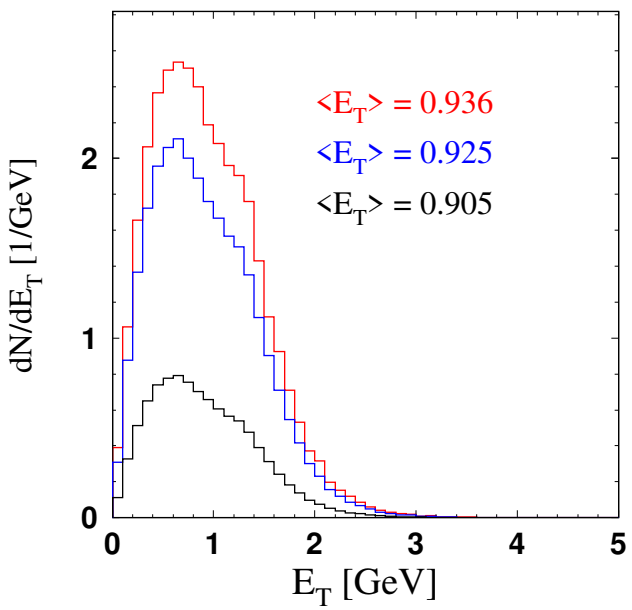


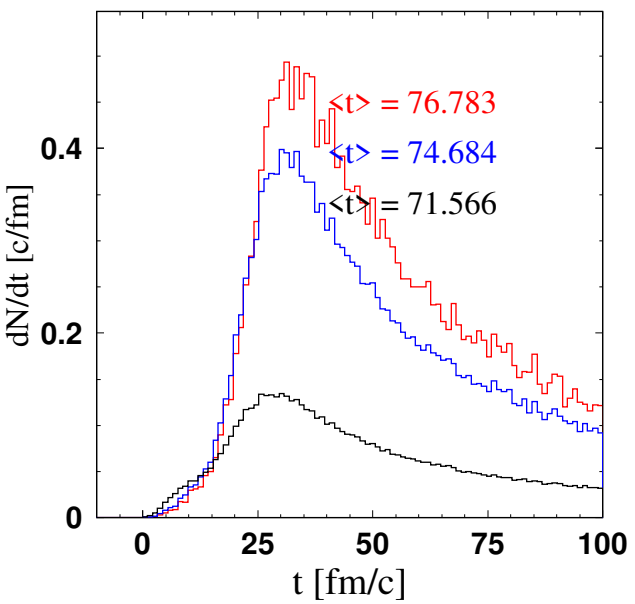

## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 10.2919±0.0721 | 8.1294±0.0319 | 2.729±0.0079 |
| \|y\|<1.0 | 18.7924±0.0974 | 14.7964±0.0431 | 4.9936±0.0107 |
| \|y\|<1.5 | 25.299±0.113 | 19.9799±0.05 | 6.8587±0.0125 |
| \|y\|<2.0 | 30.6187±0.1244 | 24.3515±0.0552 | 8.6492±0.0141 |
| 4π | 33.5333±0.1301 | 26.9702±0.0581 | 9.8444±0.015 |



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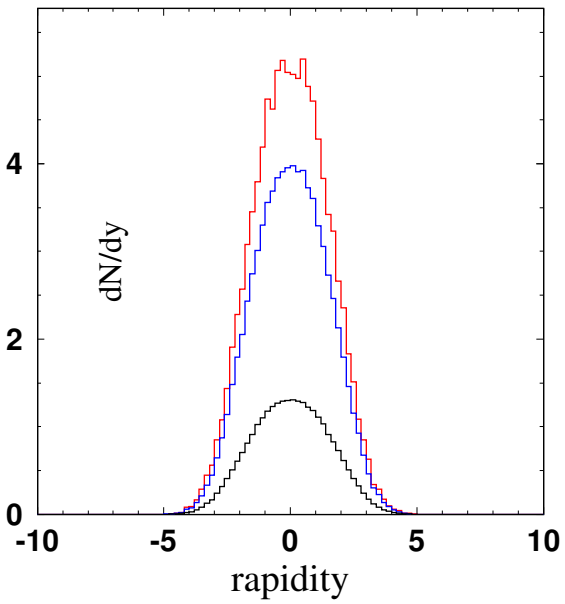
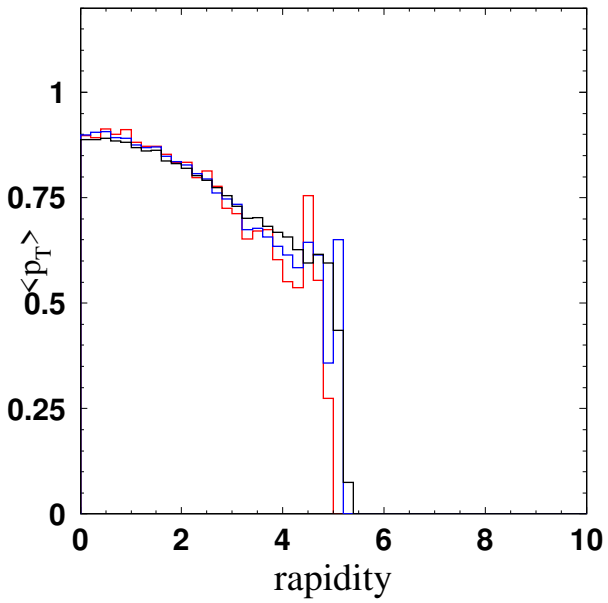
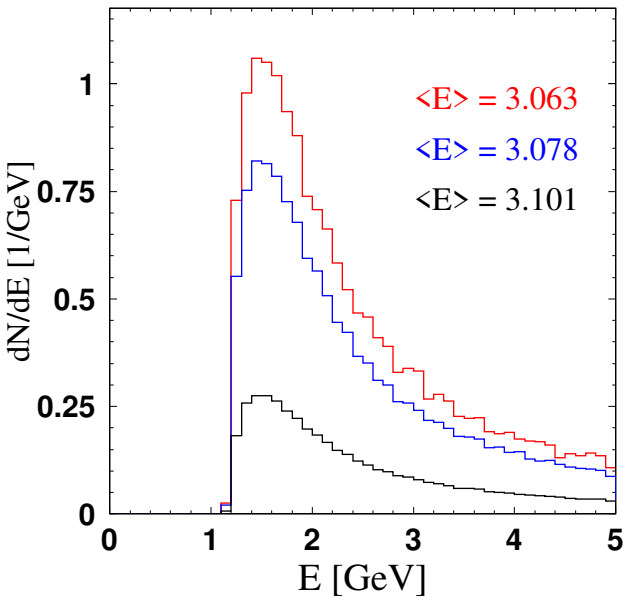
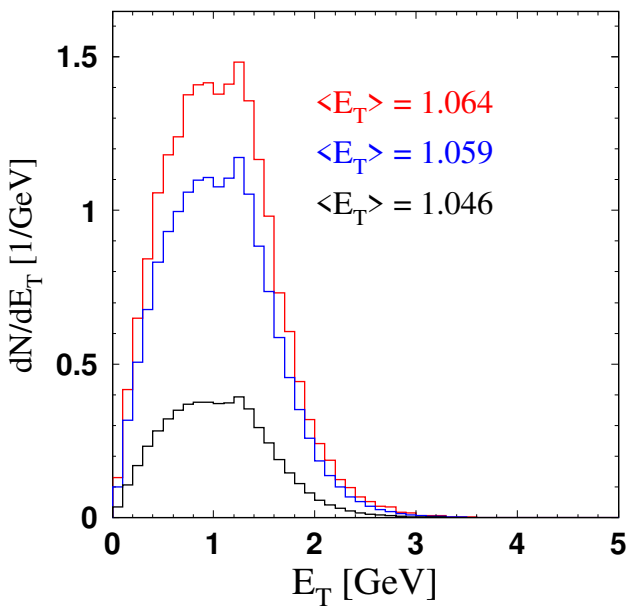


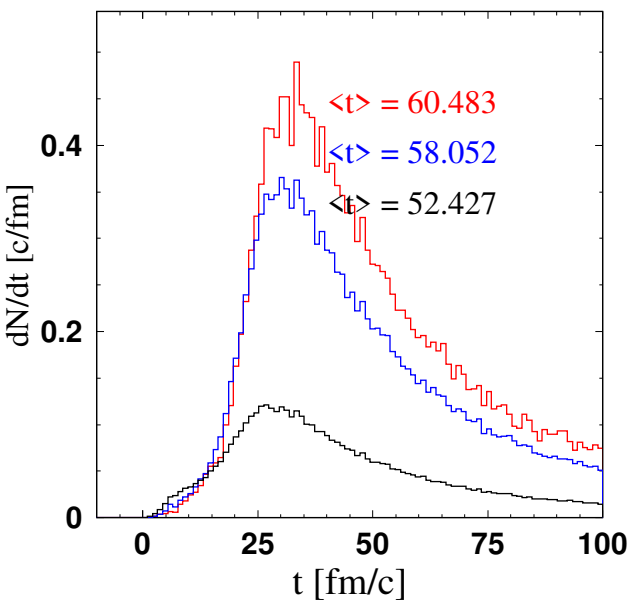

## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 9.8879±0.0707 | 7.6196±0.0309 | 2.5134±0.0076 |
| \|y\|<1.0 | 16.7914±0.0921 | 13.061±0.0405 | 4.3451±0.01 |
| \|y\|<1.5 | 19.8283±0.1001 | 15.4489±0.044 | 5.1815±0.0109 |
| \|y\|<2.0 | 20.4455±0.1016 | 15.9332±0.0447 | 5.3669±0.0111 |
| 4π | 20.495±0.1017 | 15.9742±0.0447 | 5.3844±0.0111 |



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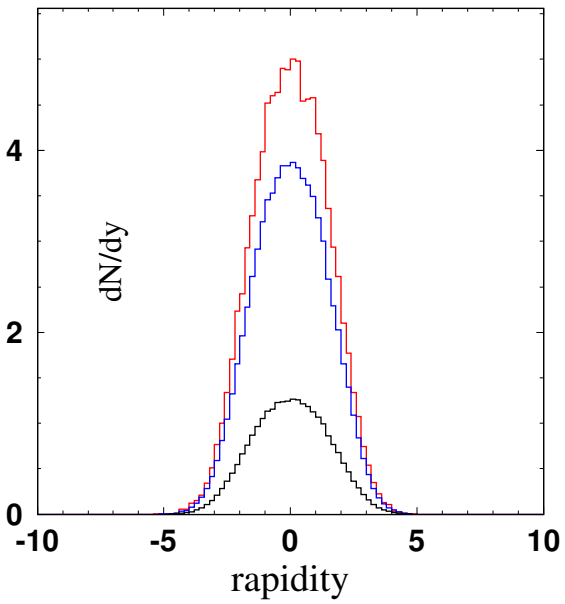
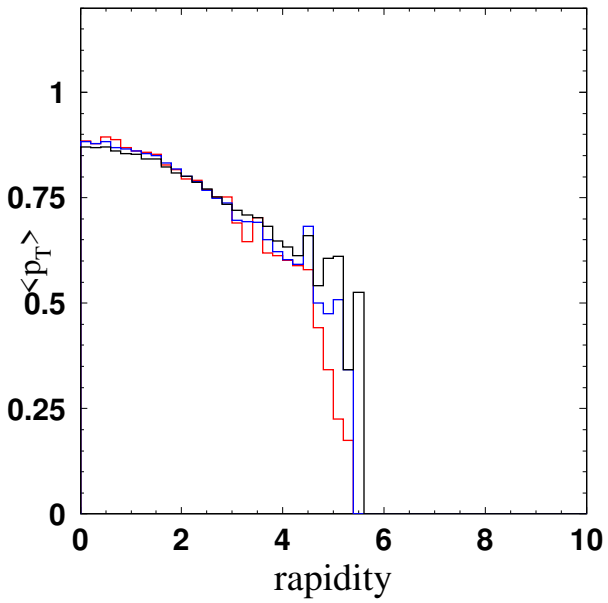
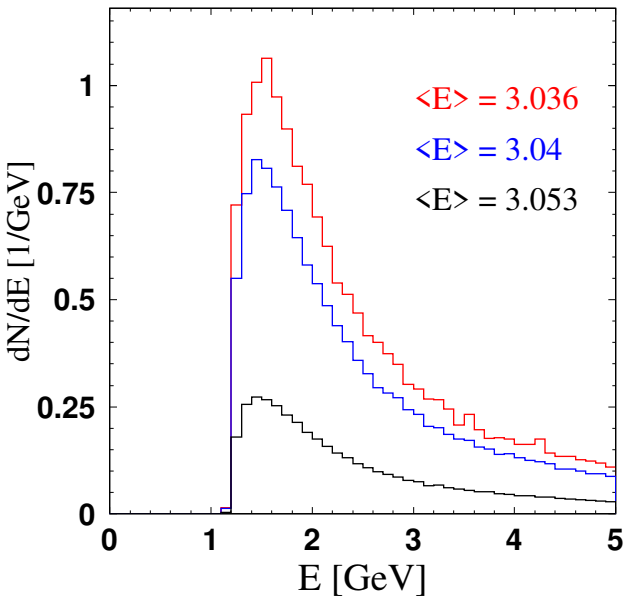
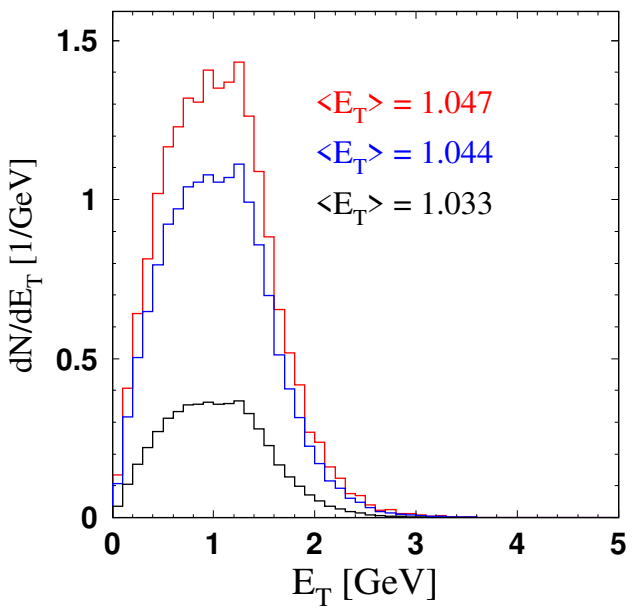


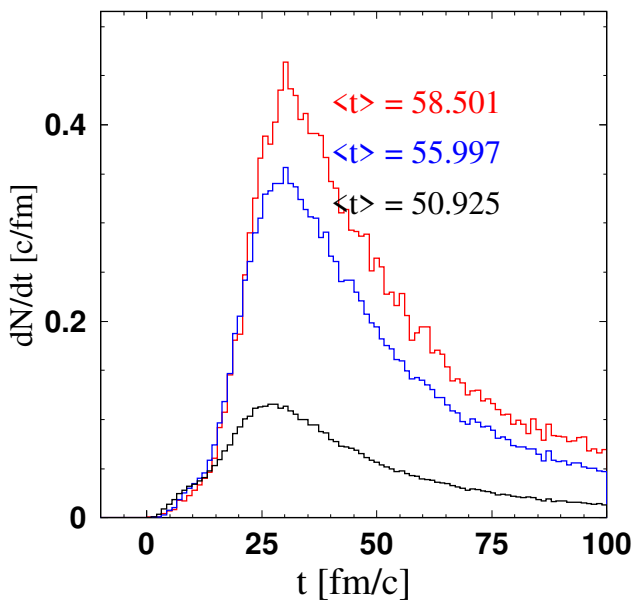

## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 9.4414±0.0691 | 7.3644±0.0304 | 2.4099±0.0074 |
| \|y\|<1.0 | 16.0985±0.0902 | 12.5955±0.0397 | 4.1458±0.0098 |
| \|y\|<1.5 | 18.9131±0.0977 | 14.8002±0.0431 | 4.8989±0.0106 |
| \|y\|<2.0 | 19.4485±0.0991 | 15.2385±0.0437 | 5.0652±0.0108 |
| 4π | 19.4929±0.0992 | 15.2779±0.0438 | 5.0809±0.0108 |



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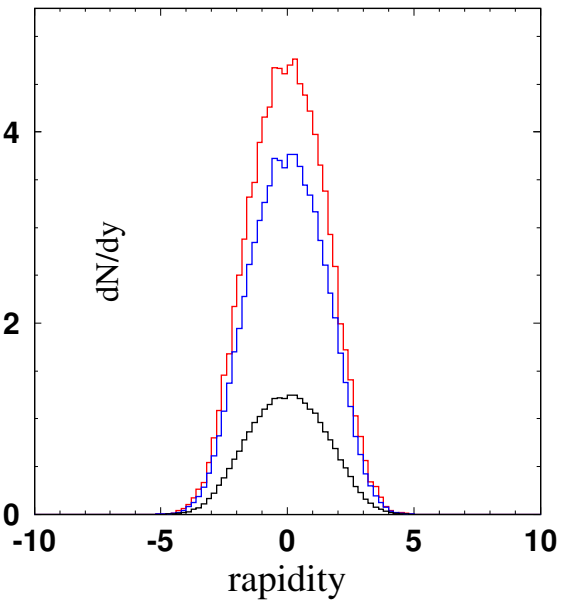
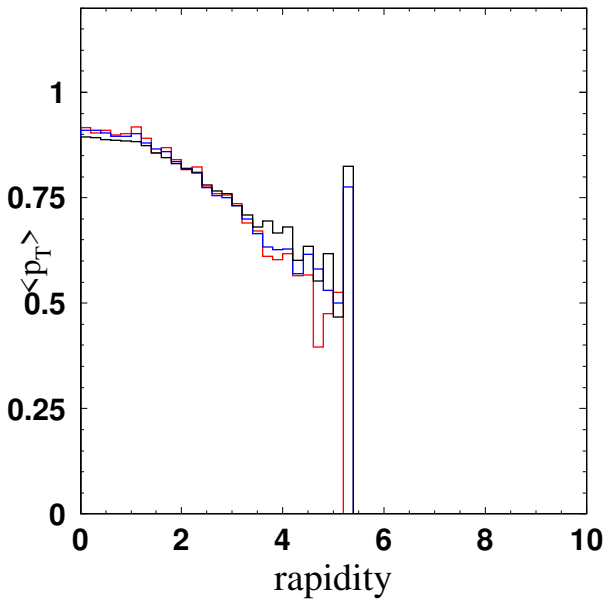
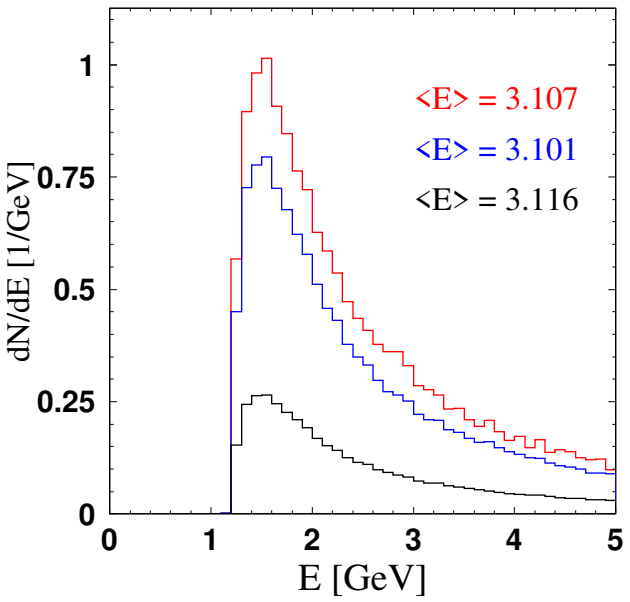
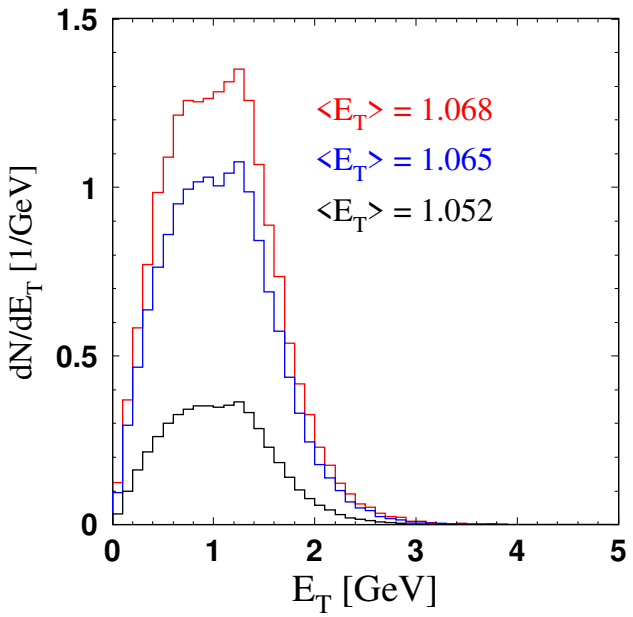


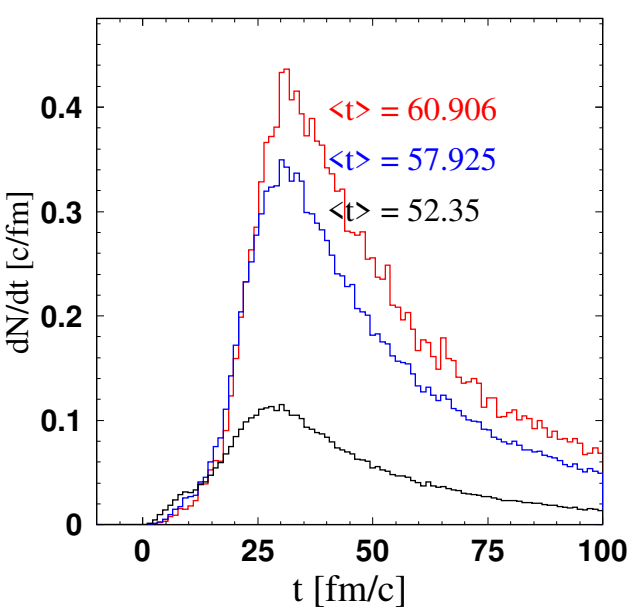

## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 8.9889±0.0674 | 7.1409±0.0299 | 2.3724±0.0074 |
| \|y\|<1.0 | 15.5081±0.0885 | 12.2937±0.0393 | 4.101±0.0097 |
| \|y\|<1.5 | 18.3394±0.0962 | 14.5366±0.0427 | 4.8883±0.0106 |
| \|y\|<2.0 | 18.9136±0.0977 | 14.9798±0.0433 | 5.0606±0.0108 |
| 4π | 18.9561±0.0978 | 15.0129±0.0434 | 5.0754±0.0108 |



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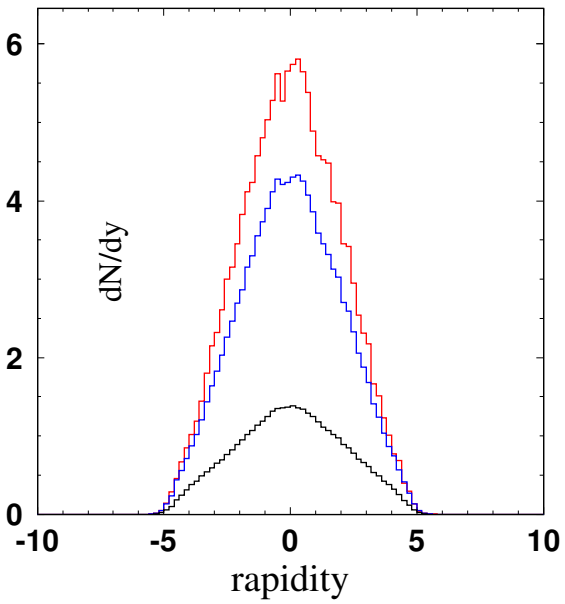
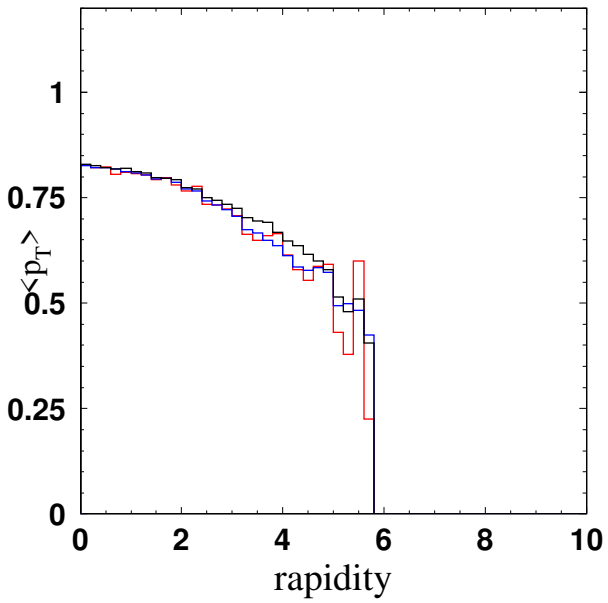
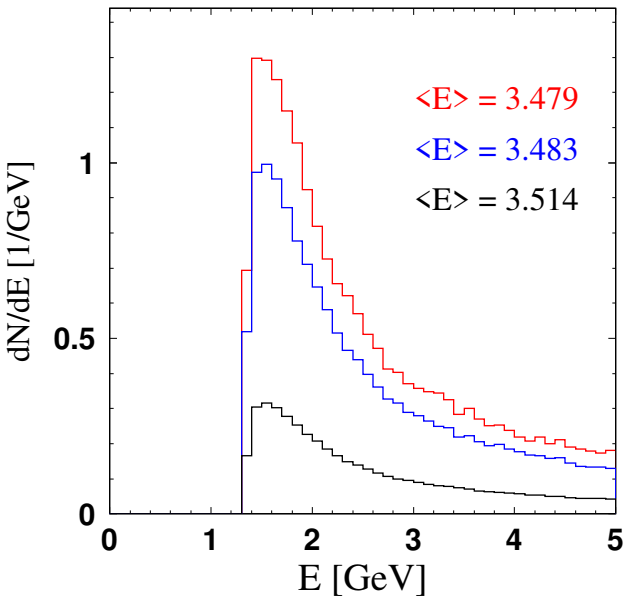
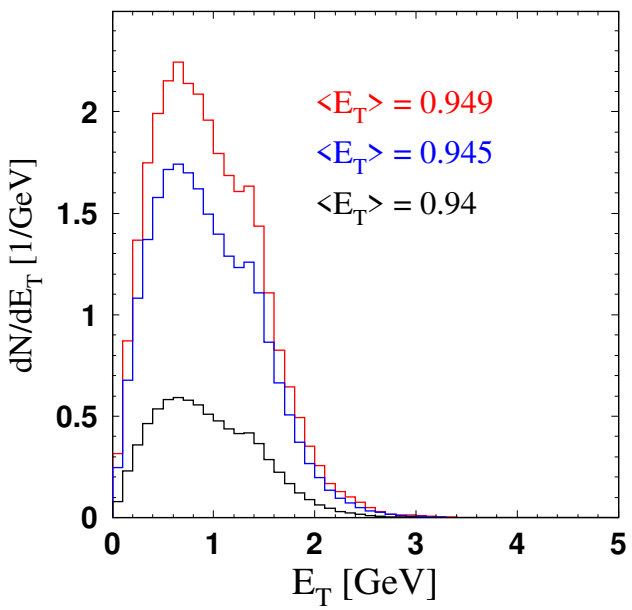


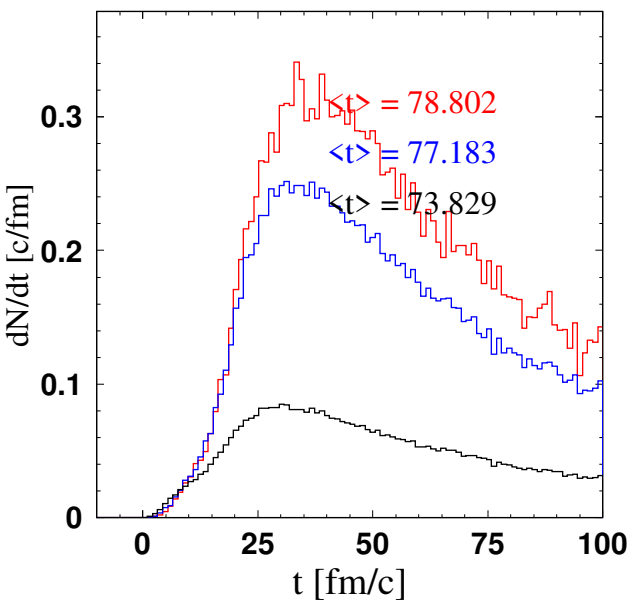

## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 10.8677±0.0741 | 8.313±0.0323 | 2.6535±0.0078 |
| \|y\|<1.0 | 19.4848±0.0992 | 14.9348±0.0433 | 4.799±0.0105 |
| \|y\|<1.5 | 25.3273±0.1131 | 19.5016±0.0494 | 6.3439±0.0121 |
| \|y\|<2.0 | 28.3682±0.1197 | 21.9835±0.0525 | 7.319±0.013 |
| 4π | 29.3343±0.1217 | 22.8535±0.0535 | 7.6976±0.0133 |



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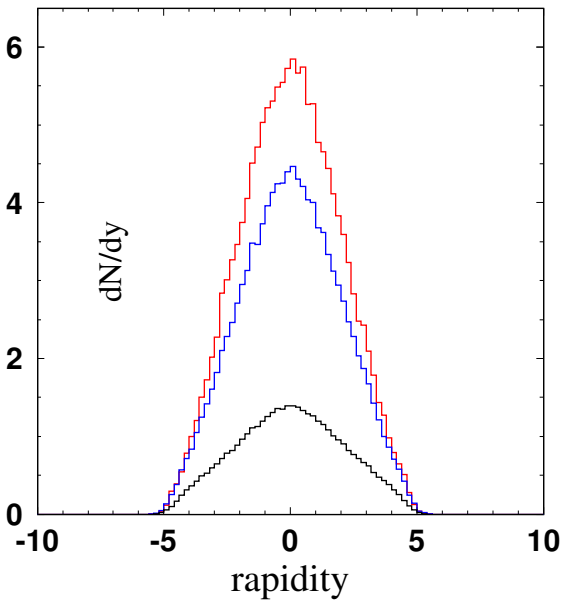
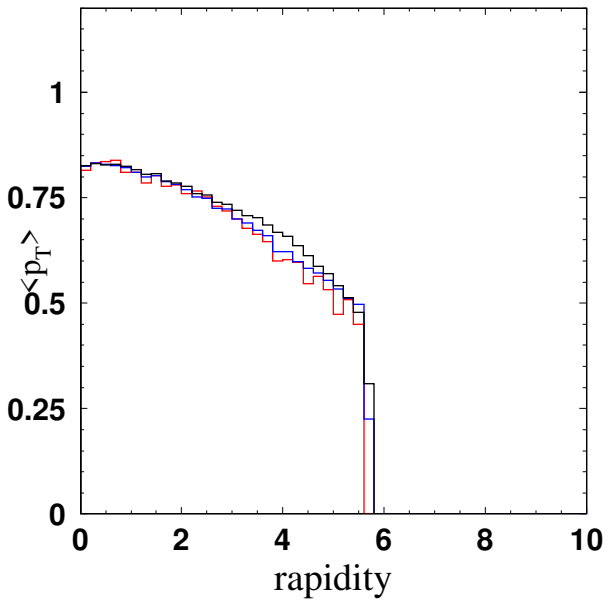
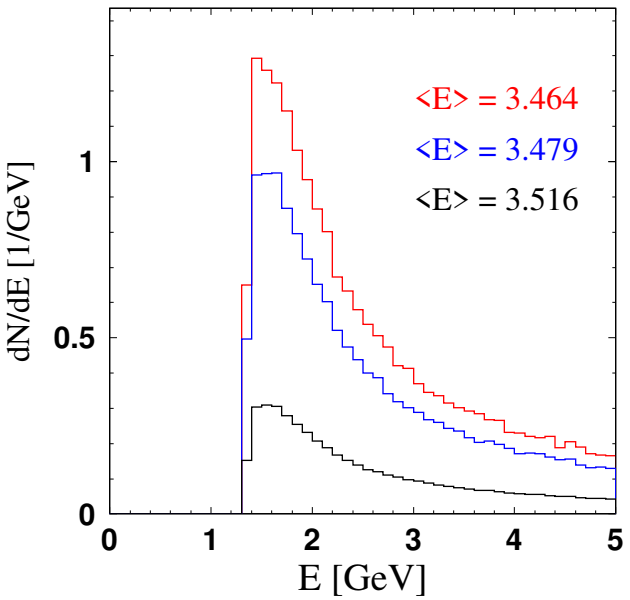
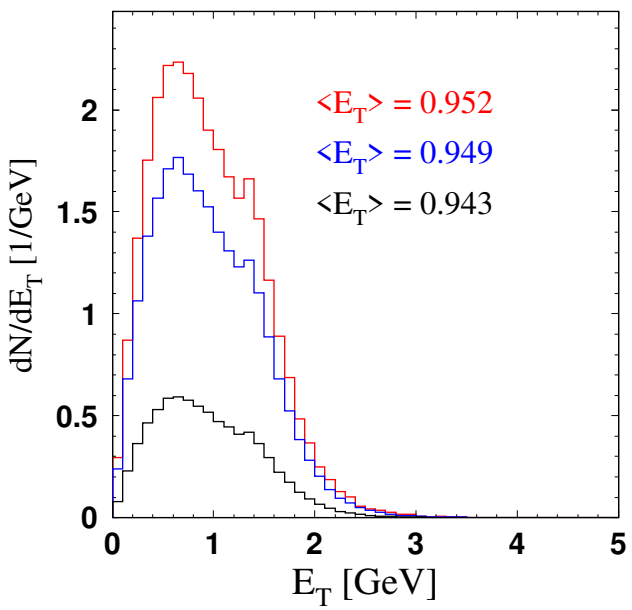


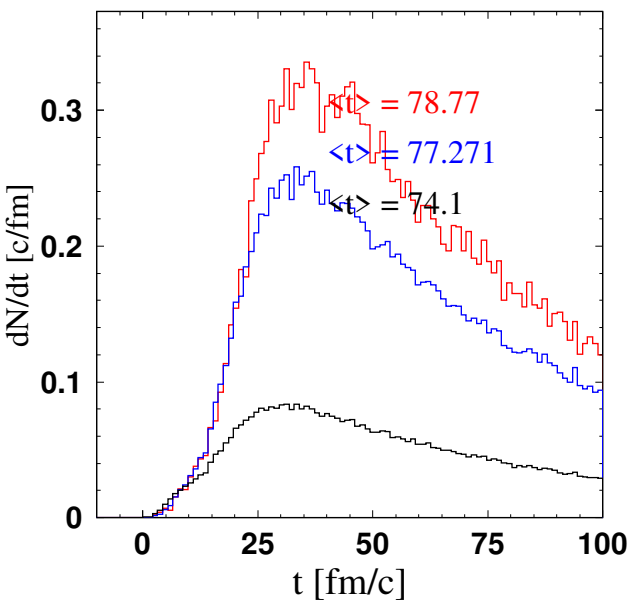

## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 11.0106±0.0746 | 8.4004±0.0324 | 2.663±0.0078 |
| \|y\|<1.0 | 19.7864±0.1 | 15.0891±0.0435 | 4.8294±0.0105 |
| \|y\|<1.5 | 25.6712±0.1139 | 19.6438±0.0496 | 6.3767±0.0121 |
| \|y\|<2.0 | 28.6722±0.1203 | 22.1119±0.0526 | 7.3495±0.013 |
| 4π | 29.5909±0.1222 | 22.9699±0.0537 | 7.7239±0.0133 |



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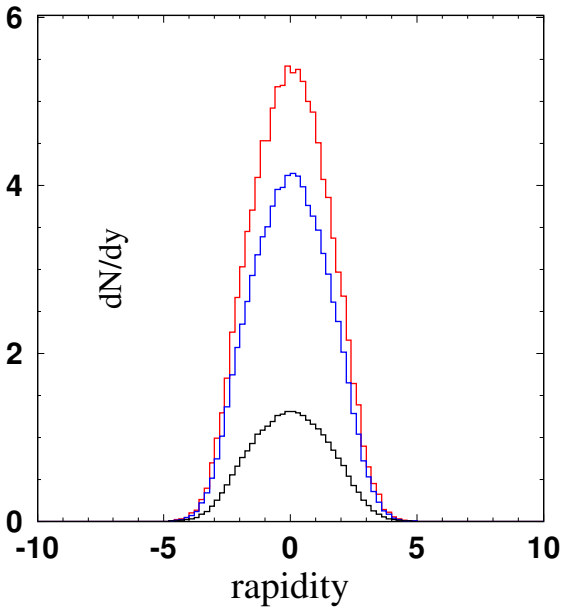
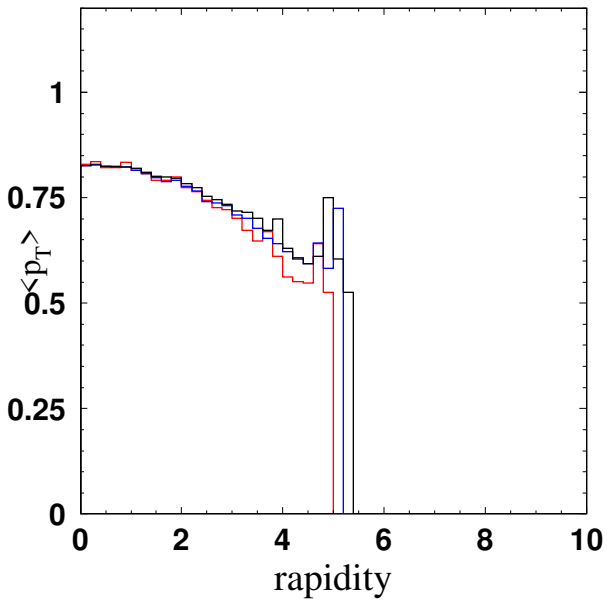
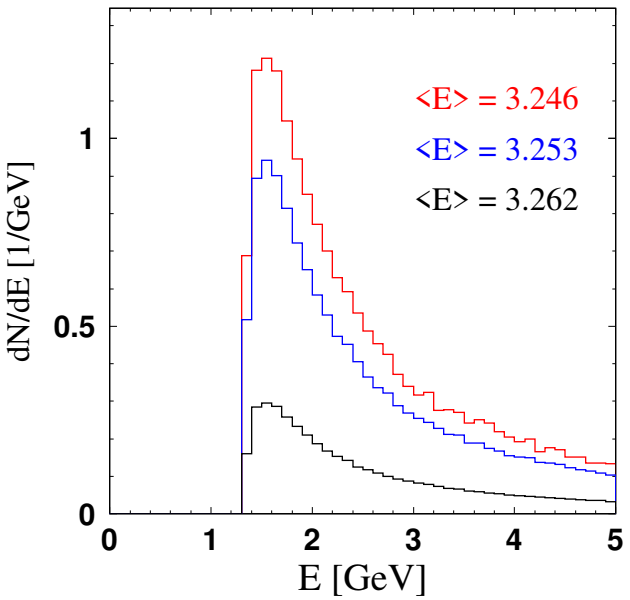
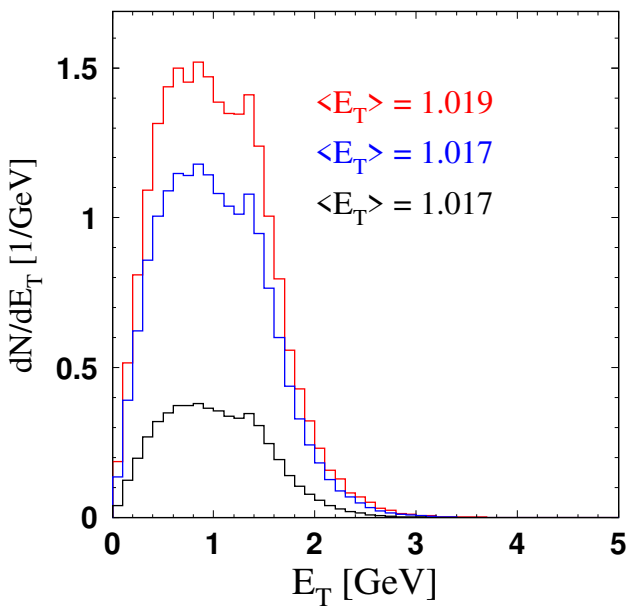


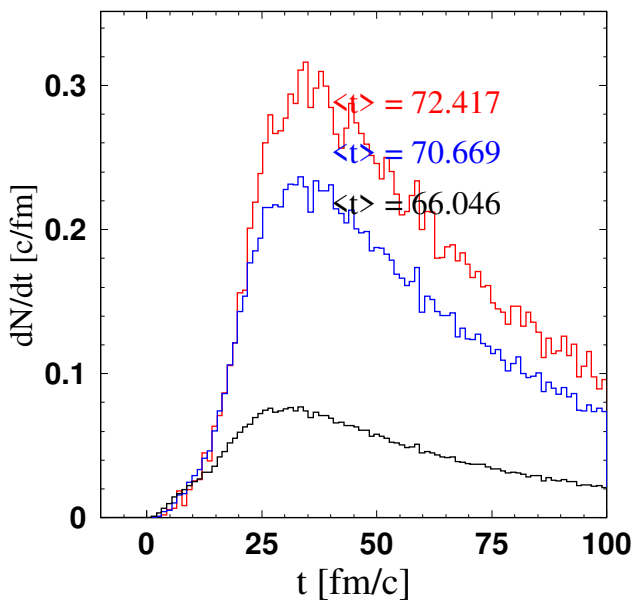

## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 10.2177±0.0718 | 7.7888±0.0312 | 2.4805±0.0075 |
| \|y\|<1.0 | 17.7399±0.0947 | 13.6013±0.0413 | 4.3434±0.01 |
| \|y\|<1.5 | 21.2732±0.1037 | 16.3302±0.0452 | 5.2362±0.011 |
| \|y\|<2.0 | 21.9247±0.1052 | 16.8485±0.046 | 5.4236±0.0112 |
| 4π | 21.9657±0.1053 | 16.8824±0.046 | 5.4391±0.0112 |



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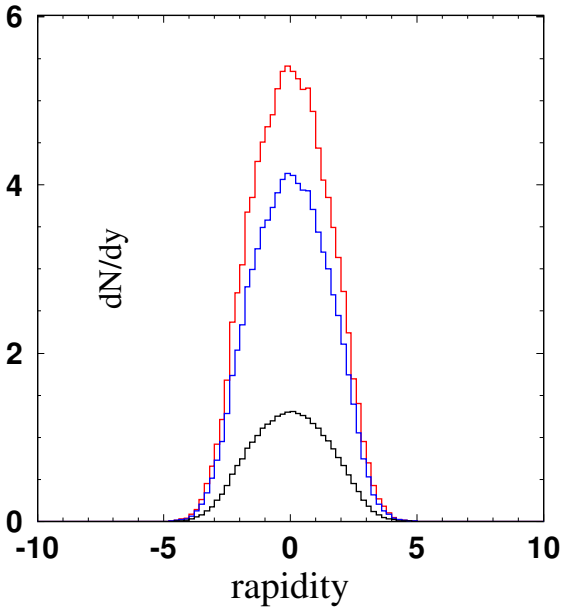
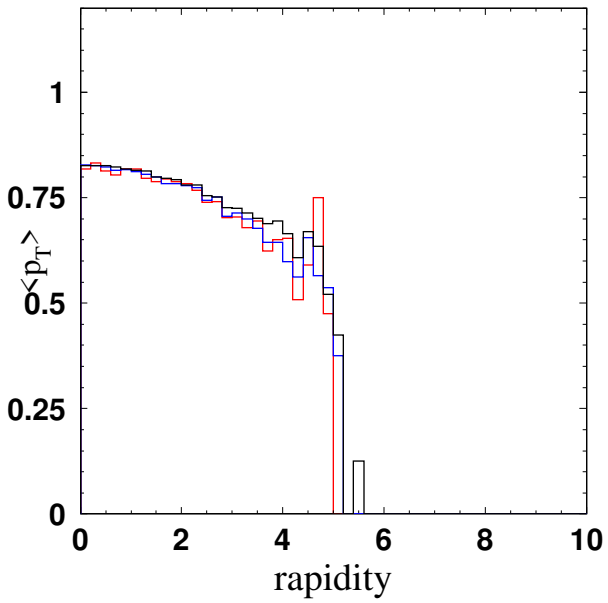
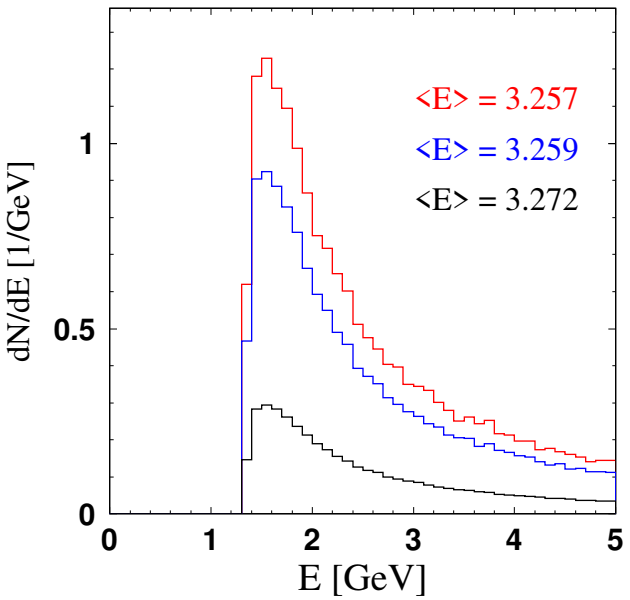
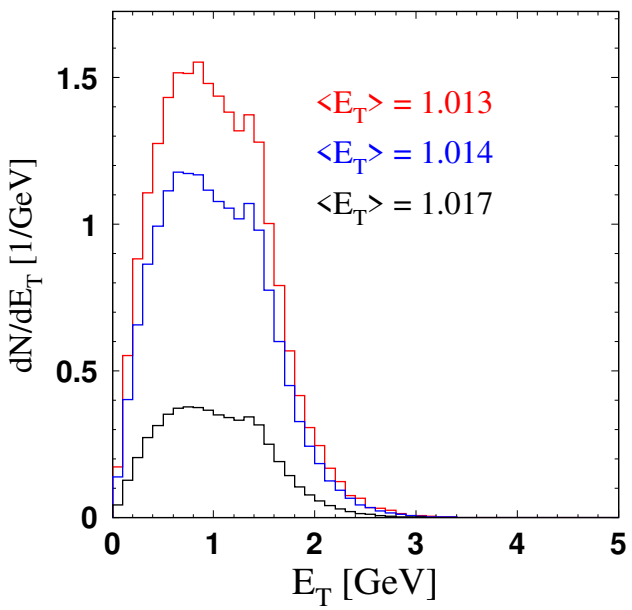


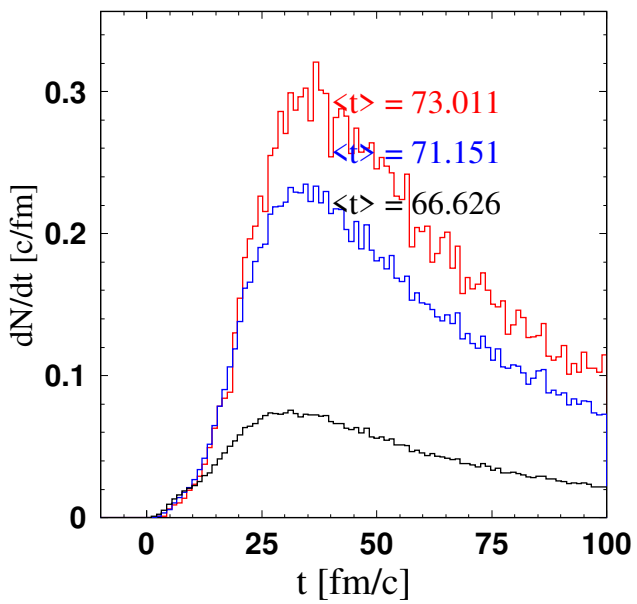

## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 10.2439±0.0719 | 7.829±0.0313 | 2.4837±0.0075 |
| \|y\|<1.0 | 17.9131±0.0951 | 13.7578±0.0415 | 4.3614±0.01 |
| \|y\|<1.5 | 21.4975±0.1042 | 16.509±0.0455 | 5.2613±0.011 |
| \|y\|<2.0 | 22.1505±0.1058 | 17.01±0.0462 | 5.4449±0.0112 |
| 4π | 22.1854±0.1059 | 17.0389±0.0462 | 5.4584±0.0112 |



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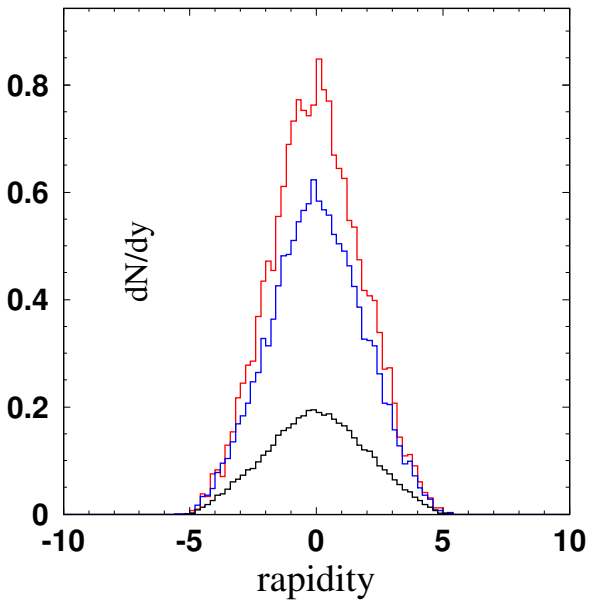
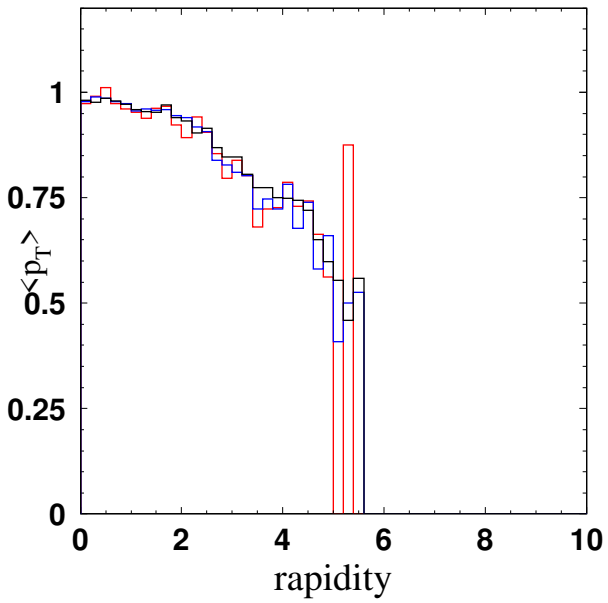
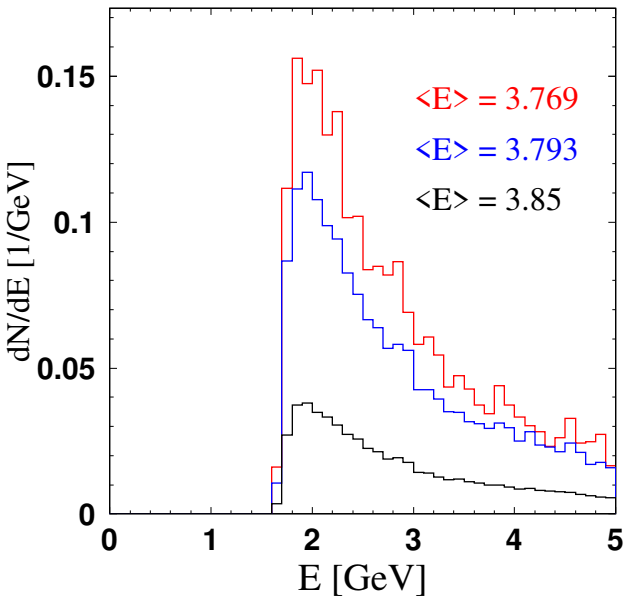
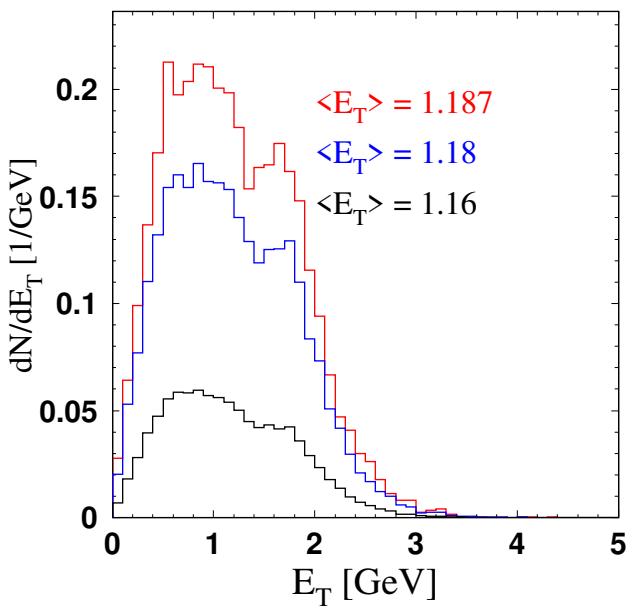


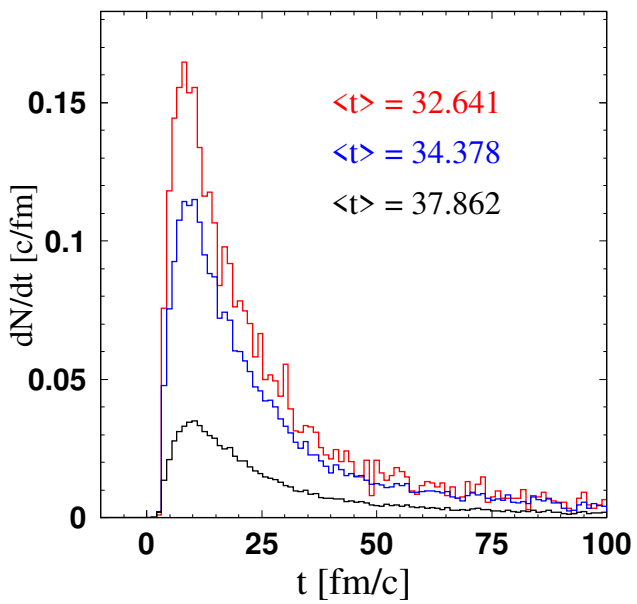

## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 1.497±0.0275 | 1.1119±0.0118 | 0.3656±0.0029 |
| \|y\|<1.0 | 2.5737±0.0361 | 1.9438±0.0156 | 0.6503±0.0039 |
| \|y\|<1.5 | 3.2333±0.0404 | 2.4517±0.0175 | 0.8346±0.0044 |
| \|y\|<2.0 | 3.4965±0.042 | 2.678±0.0183 | 0.932±0.0046 |
| 4π | 3.5611±0.0424 | 2.7329±0.0185 | 0.9595±0.0047 |



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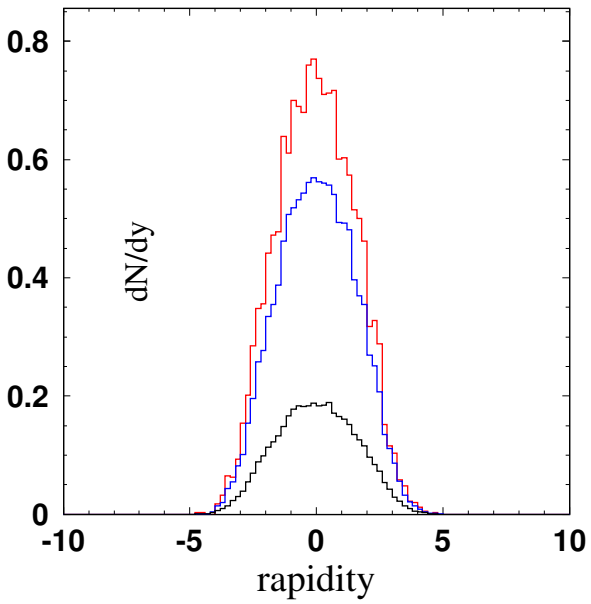
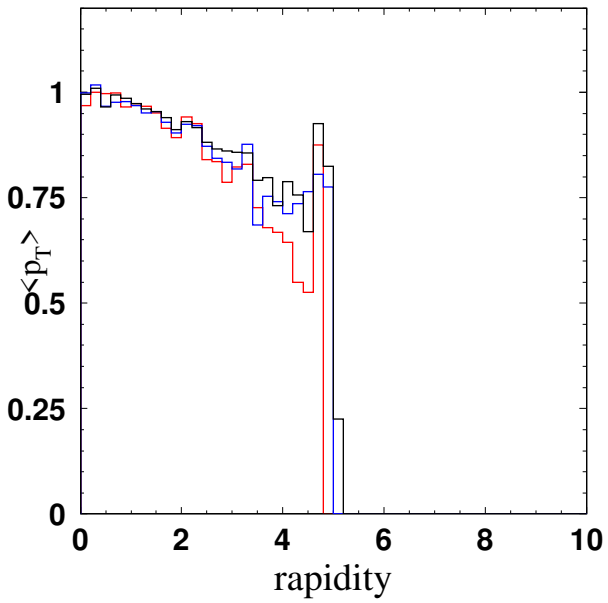
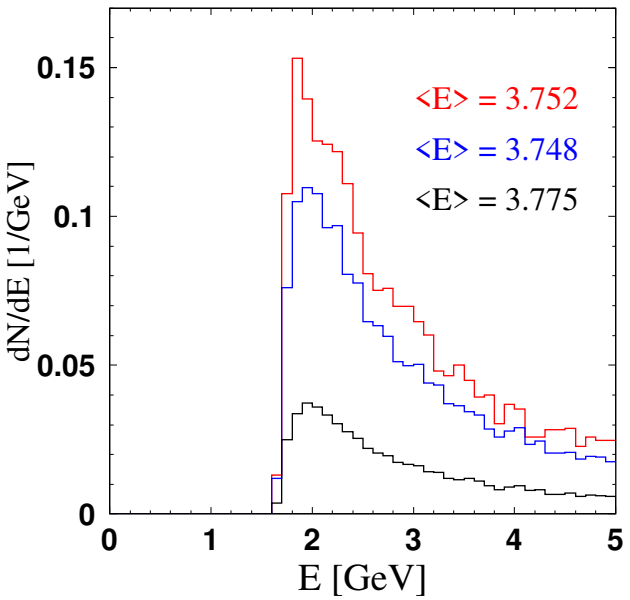
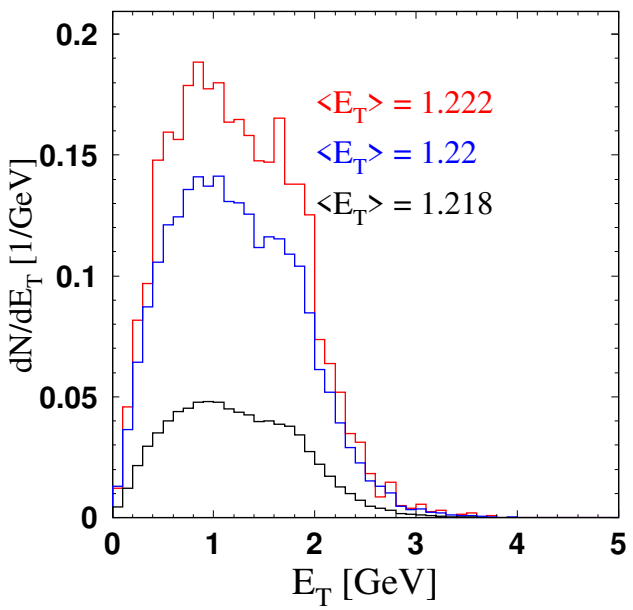
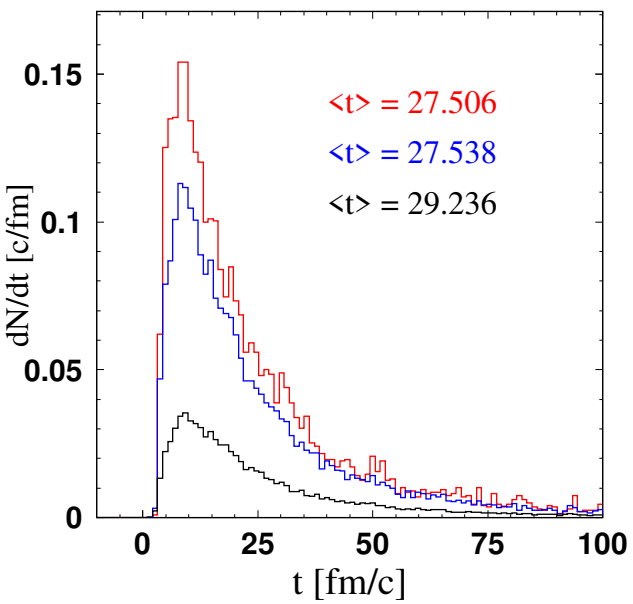



## Multiplicity

| | b≤3 [fm] | b≤6 [fm] | b≤14 [fm] |
|---|---|---|---|
| \|y\|<0.5 | 1.4152±0.0267 | 1.0876±0.0117 | 0.3619±0.0029 |
| \|y\|<1.0 | 2.4742±0.0353 | 1.9159±0.0155 | 0.6365±0.0038 |
| \|y\|<1.5 | 2.9838±0.0388 | 2.308±0.017 | 0.7771±0.0042 |
| \|y\|<2.0 | 3.0889±0.0395 | 2.3928±0.0173 | 0.8099±0.0043 |
| 4π | 3.0939±0.0395 | 2.3978±0.0173 | 0.813±0.0043 |