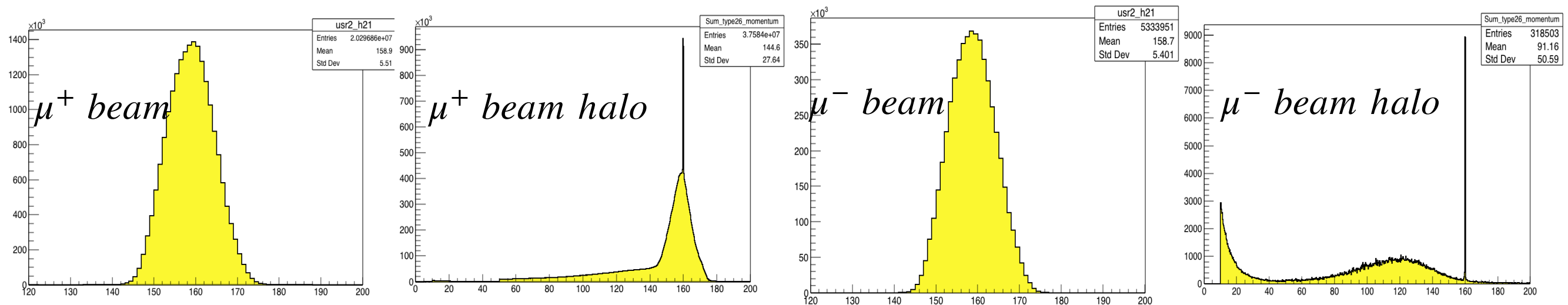


UserEvent2

/afs/cern.ch/compass/dvcs/MonteCarlo/beam_halo_2012/phast.7.141/user/UserEvent2.cc

```
274  if( firstZ < 0. && mom > 0. ) {
275      ttype = 1 ;           // true beam type
276  }
277  else if( lastZ > 1800. && firstZ>0. && mom > 50. && Q>0. ) {
278      ttype = 2 ;           // true beam/halo type SM2 (+SM1?)
279  }
280  else if( firstZ > 0. && lastZ >350. && lastZ < 1800. && mom > 10. && mom <50. && Q>0. ) {
281      ttype = 3 ;           // true beam/halo type SM1
282  }
283  else if( firstZ>350. && lastZ < 1800. && lastZ > 1450. && nhitMA >=10 ) { //1450 MUF1
284      ttype = 4 ;           // halo type 4 (MA+something
285      if( firstZ>1350. && nhitMA >=12 ) ttype = 5; // halo type 5 (MA only)
286  }
287  else if( firstZ<3800. && lastZ > 3800.) {
288      ttype = 6 ;           // halo type 6 (MB + something)
289  } else {
290      continue;
291  }
```

Results from the default UserEvent2 (P09slot5.1):

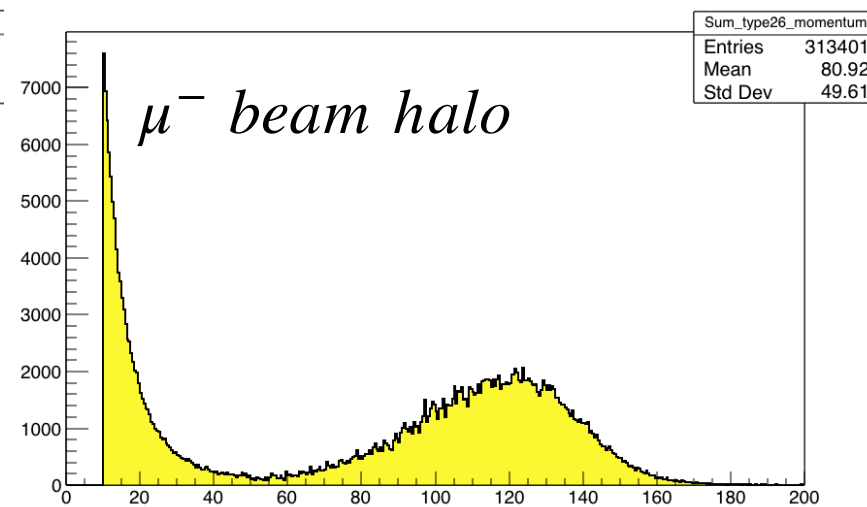
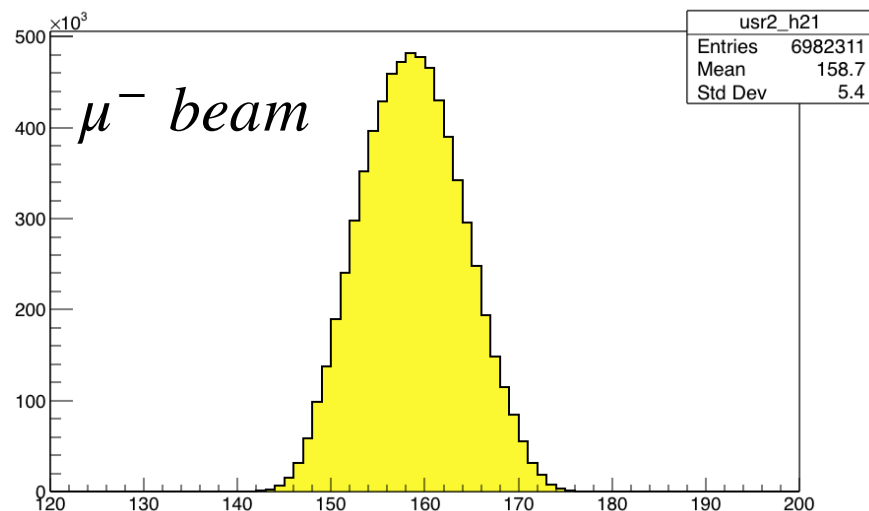
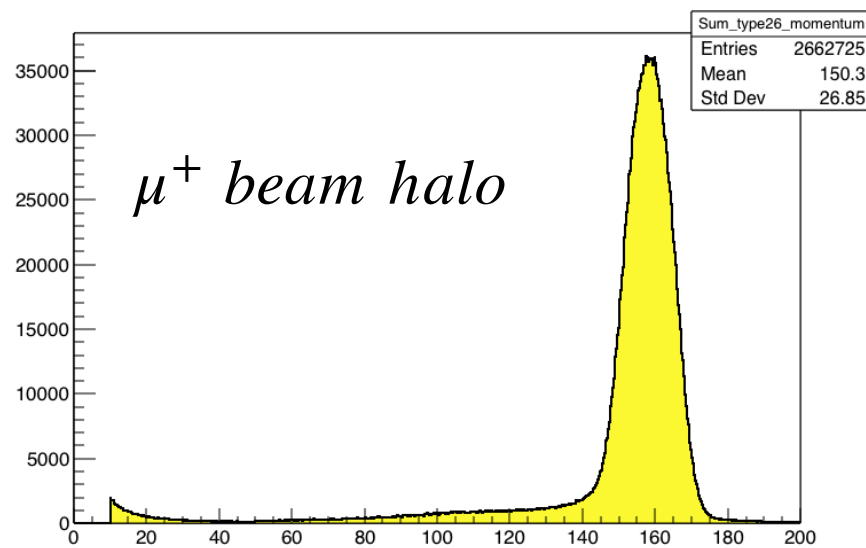
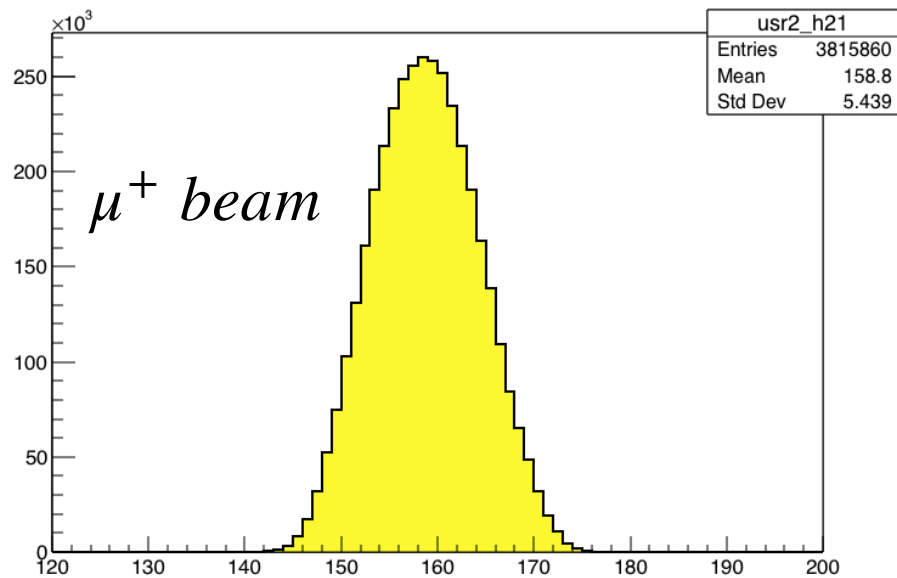


Modification of UserEvent2

+ Random trigger selection

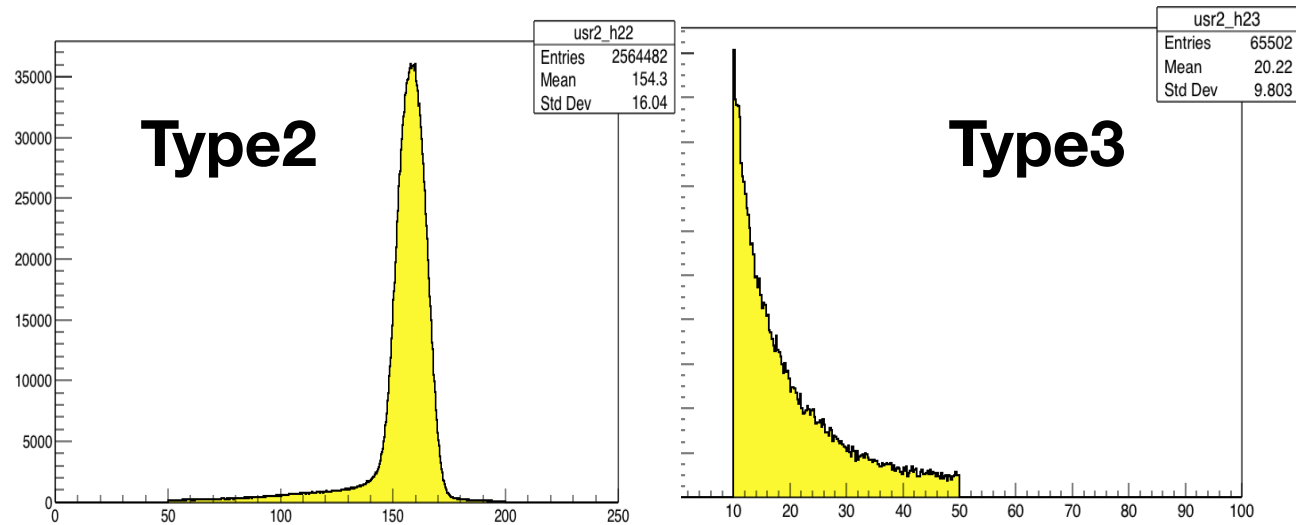
+ Beam halo type2 cut (μ^+ beam);

+ Beam halo type6 cut (μ^- beam)



Beam Halo

μ^+



μ^-

