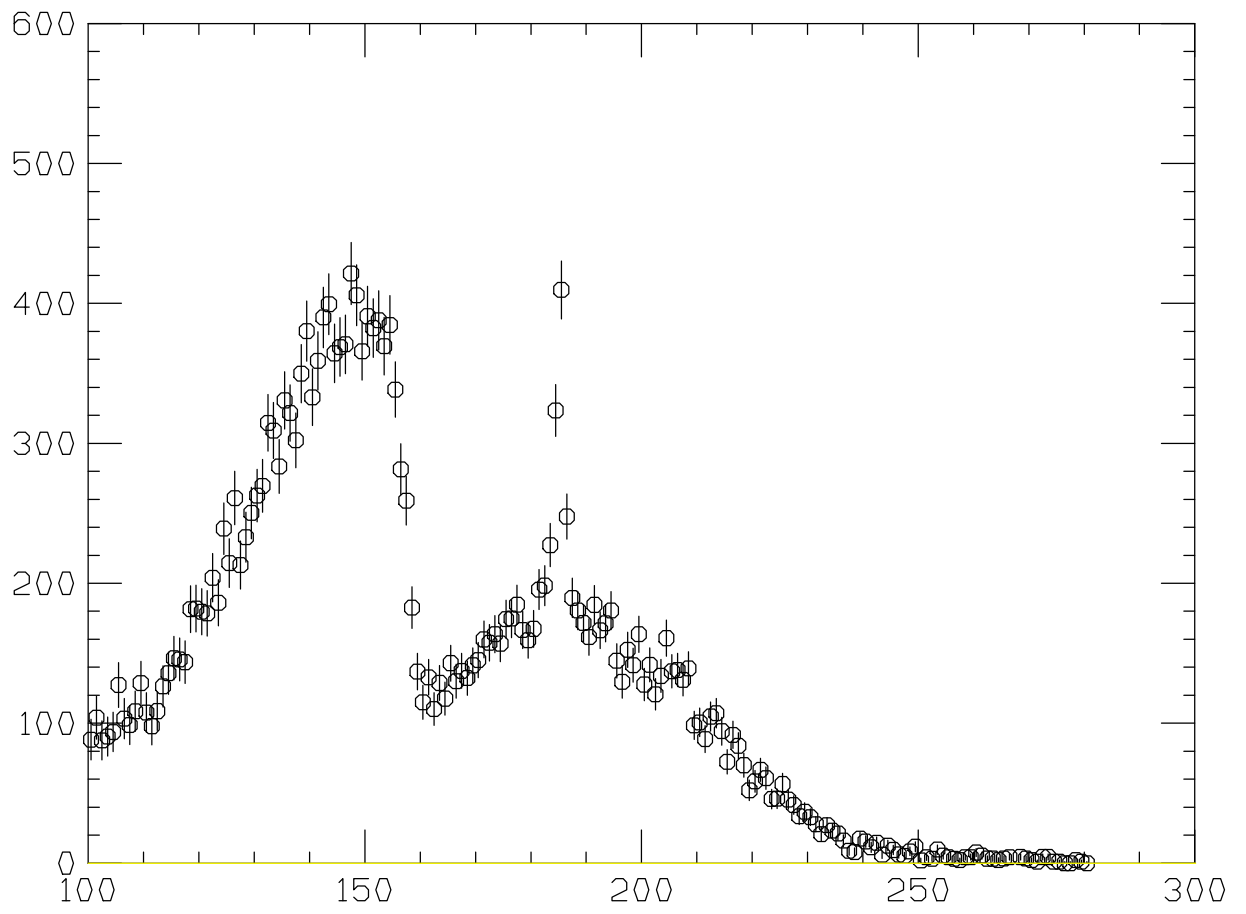


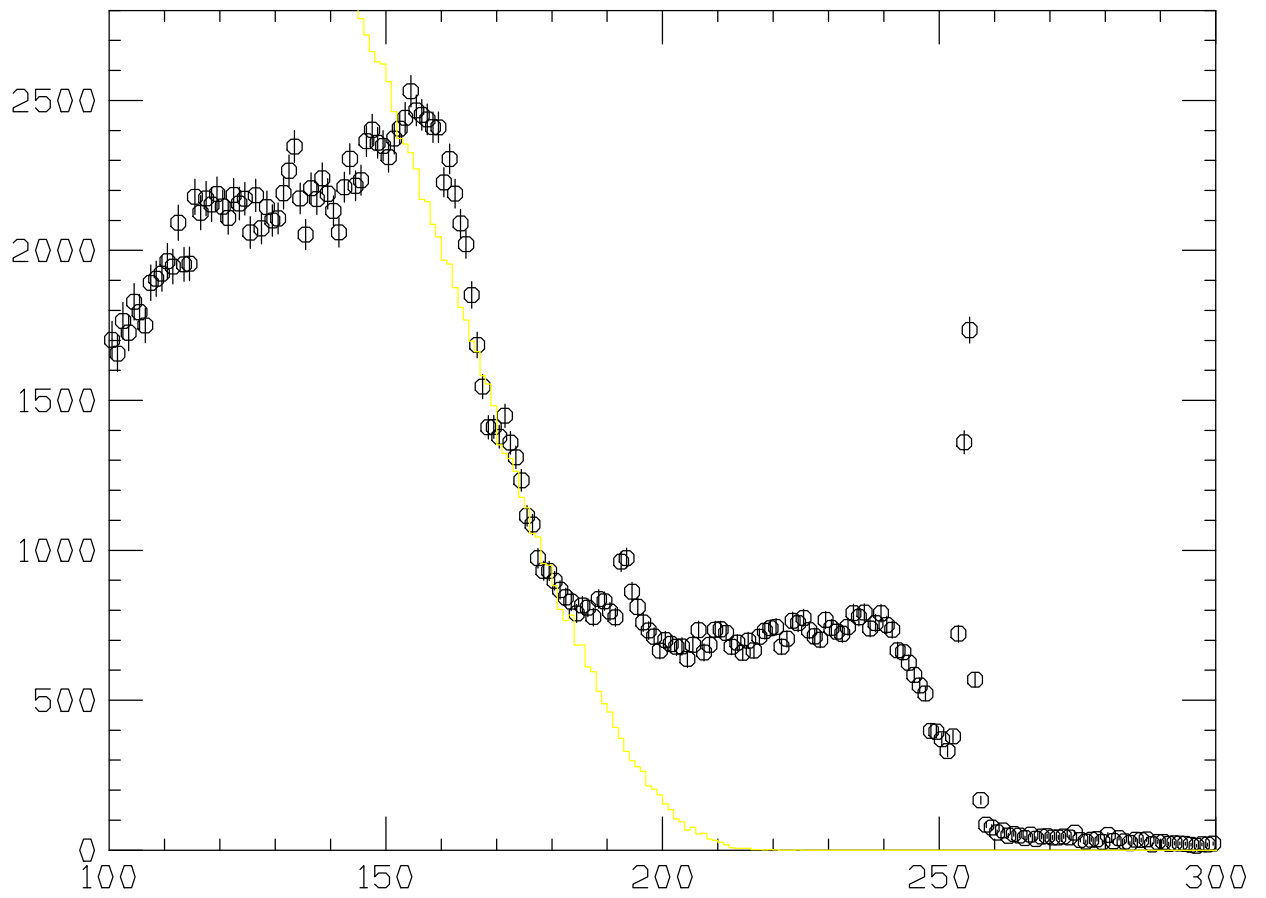
```

1  Save directory = ./B160-Lpn/
2  Total Kaon Number to be generated = 2.00000 (M) events
3  ##### K Nucleus -----
4     branch 1.00000 Binding energy: 160.000 MeV      Width 25.0000 MeV (FWHM)
5  # Knucl decay branch was set to -----
6  reaction  branch   :  SL conv.
7  He3K -> L pi- p p   0.000000 : 0.000000
8  He3K -> S0 n p      0.000000 : 1.110000E-02
9  He3K -> S- p p      0.000000 : 2.220000E-02
10 He3K -> S+ n n      0.000000 : 2.220000E-02
11 He3K -> L n p       1.000000 : 0.000000
12 He3K -> L d         0.000000 : 0.000000
13 He3K -> pi0 L p n   0.000000 : 0.000000
14 #Quasi-free branch was set to -----
15 reaction  branch   SL conv.  Y scat.  pi scat.  pi abs.i  Escape
16 1) Sigma+ pi- 31.82 : 0.600 0.002 0.002 0.002 0.394
17 2) Sigma- pi+ 10.00 : 0.300 0.002 0.002 0.002 0.694
18 3) Sigma0 pi0 16.36 : 0.450 0.002 0.002 0.002 0.544
19 4) Sigma- pi0 9.09 : 0.600 0.002 0.002 0.002 0.394
20 5) Sigma0 pi- 9.09 : 0.450 0.002 0.002 0.002 0.544
21 6) Lambda pi0 7.73 : 0.000 0.002 0.002 0.002 0.994
22 7) Lambda pi- 15.45 : 0.000 0.002 0.002 0.002 0.994
23 8) Sigma+ pi0 0.45 : 0.000 0.000 0.000 0.000 1.000
24 # ratio of 1N / 2N reaction for QF reaction
25 # primary
26 0.920 Sigma quasi_free process
27 0.920 Lambda quasi_free process
28 # secondary
29 0.920 Sigma-Lambda conversion
30 0.920 Sigma-residual scattering
31 0.920 Lambda-residual scattering
32 0.920 pion scattering (pi induced brackup)
33 # K Non-mesic absorption branch was set to -----
34 reaction  branch   SL conv.  Y scat.  Escape
35 1) L n d 0.59 : 0.000 0.005 0.995
36 ?) L p n n 0.00 :
37 2) S0 n d 0.14 : 0.300 0.005 0.695
38 3) S- p d 0.22 : 0.300 0.005 0.695
39 4) S+ n n n 0.05 : 0.000 0.000 1.000
40 # ratio of 1N(+Y) / 2N(+Y) reaction for KN non-mesic absorption
41 0.500 Sigma none-mesic
42 0.500 Lambda none-mesic
43 # piN 2-nucleon absorption -----
44 # ratio of 2N / 3N reaction for piN absorption
45 0.500 pi- He -> nnd / pnnn
46 ##### ratio #####
47 knucl, QF, none-mesic, L_Hyp, S_Hyp : total
48 1.00000 0.000000 0.000000 0.000000 0.000000 1.00000
49 # Hypernuclei
50 B_Sp0, G_Sp0, B_L0, G_L0 2.00000 12.0000 2.30000 2.50000
51
52 ##### global simulation condition #####
53 NC thickness (cm) 5.00000
54 NC position resolution (sigma in cm) 2.50000

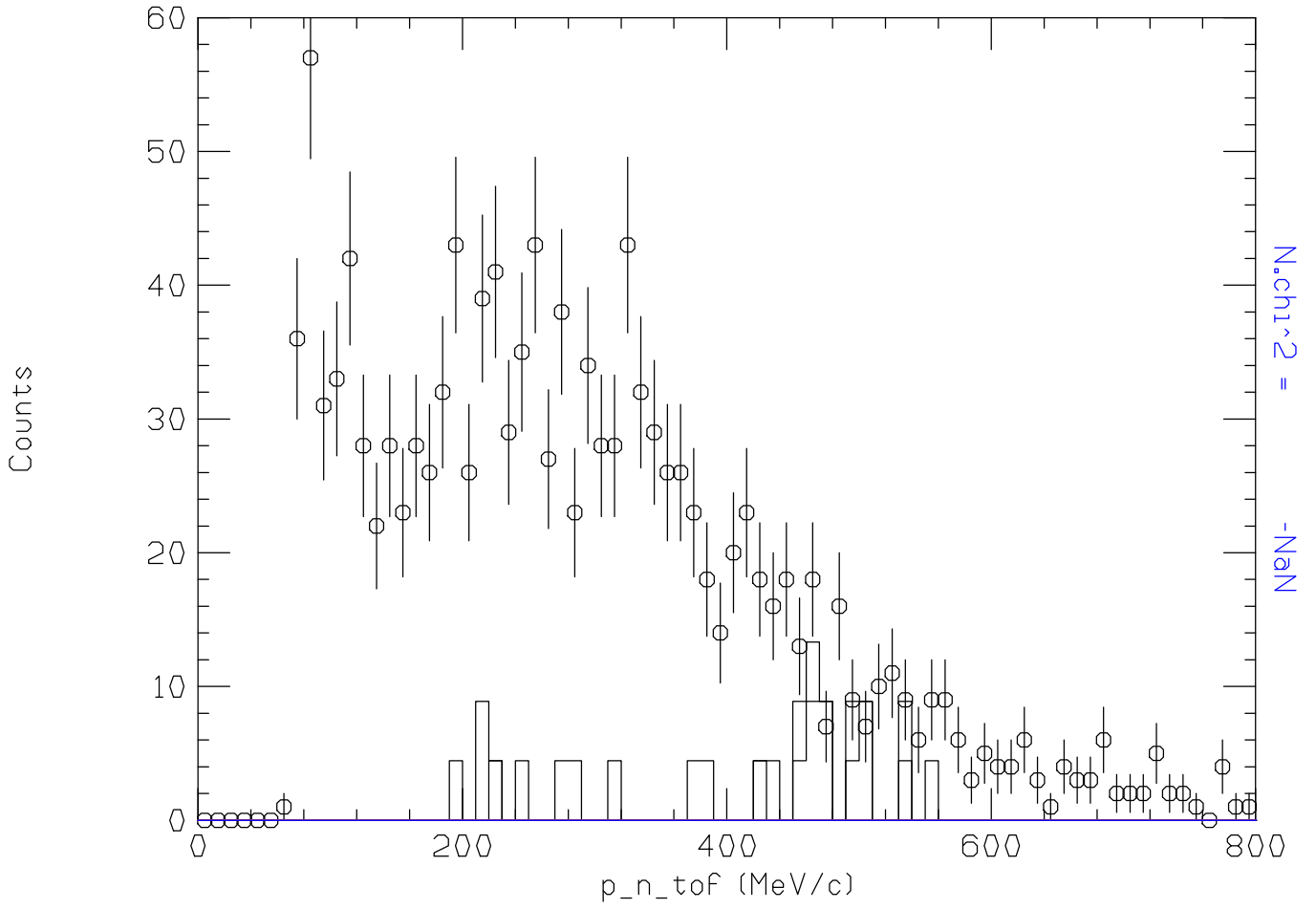
```

```
55 T0 counter time resolution (nsec) 0.150000
56 neutron counter time resolution (nsec) 0.150000
57 TC light-guide acceptance 0.450000
58 T0 light-guide acceptance 0.800000
59 Coulomb scattering ON(=1)/OFF(=0) 1
60 kaon decay ON(=1)/OFF(=0) 0
61 T0-time correction ON(=1)/Skip(=0) T
62 Apply nuclear formfactor ON(=1)/OFF(=0) 2
63 neutron constant background level 0.350000
64 Neutron production durling pion travel 0.000000
65 VDC threshold 0.000000 (MeV)
66 VDC resolution 0.000000 (cm)
```

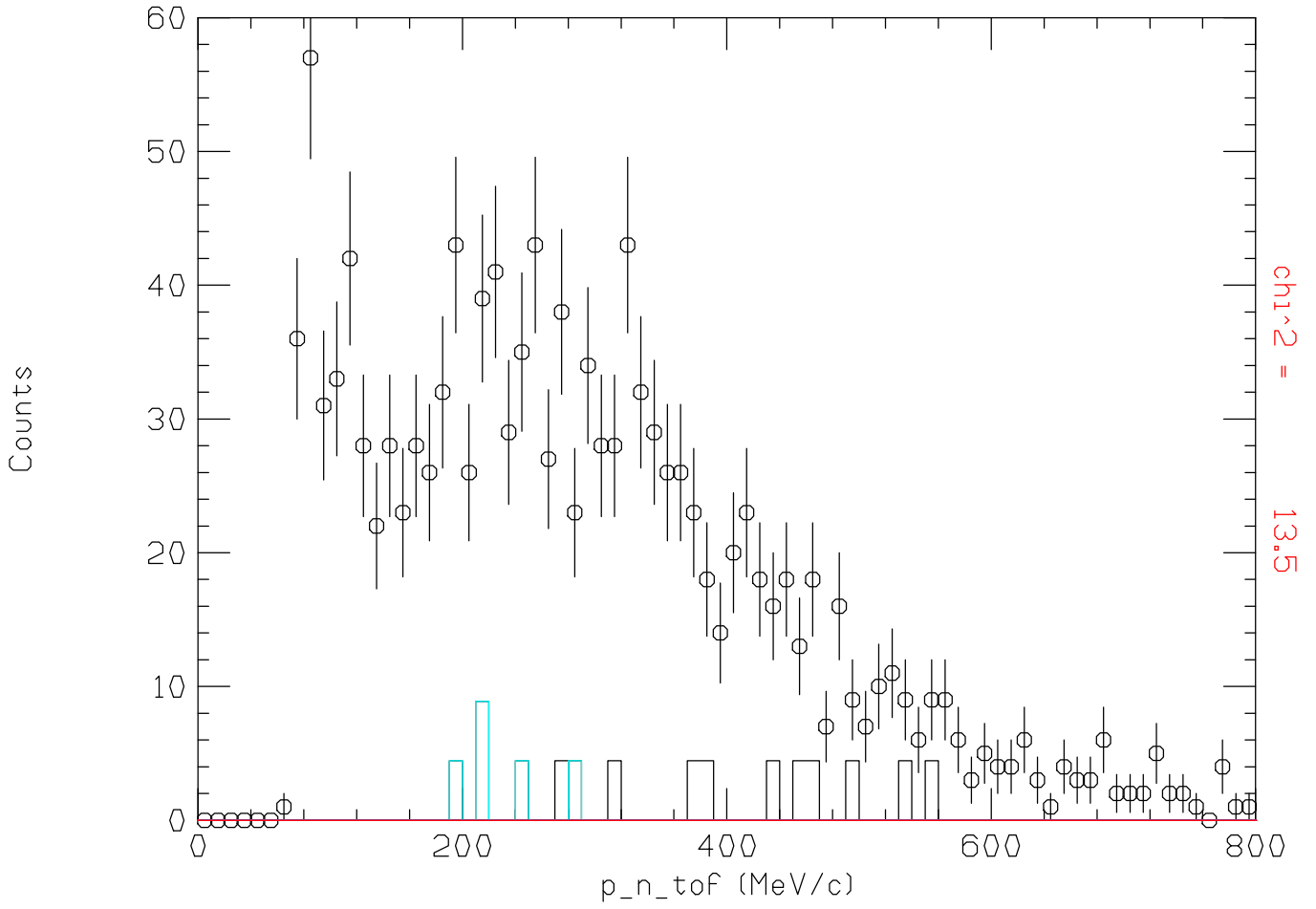




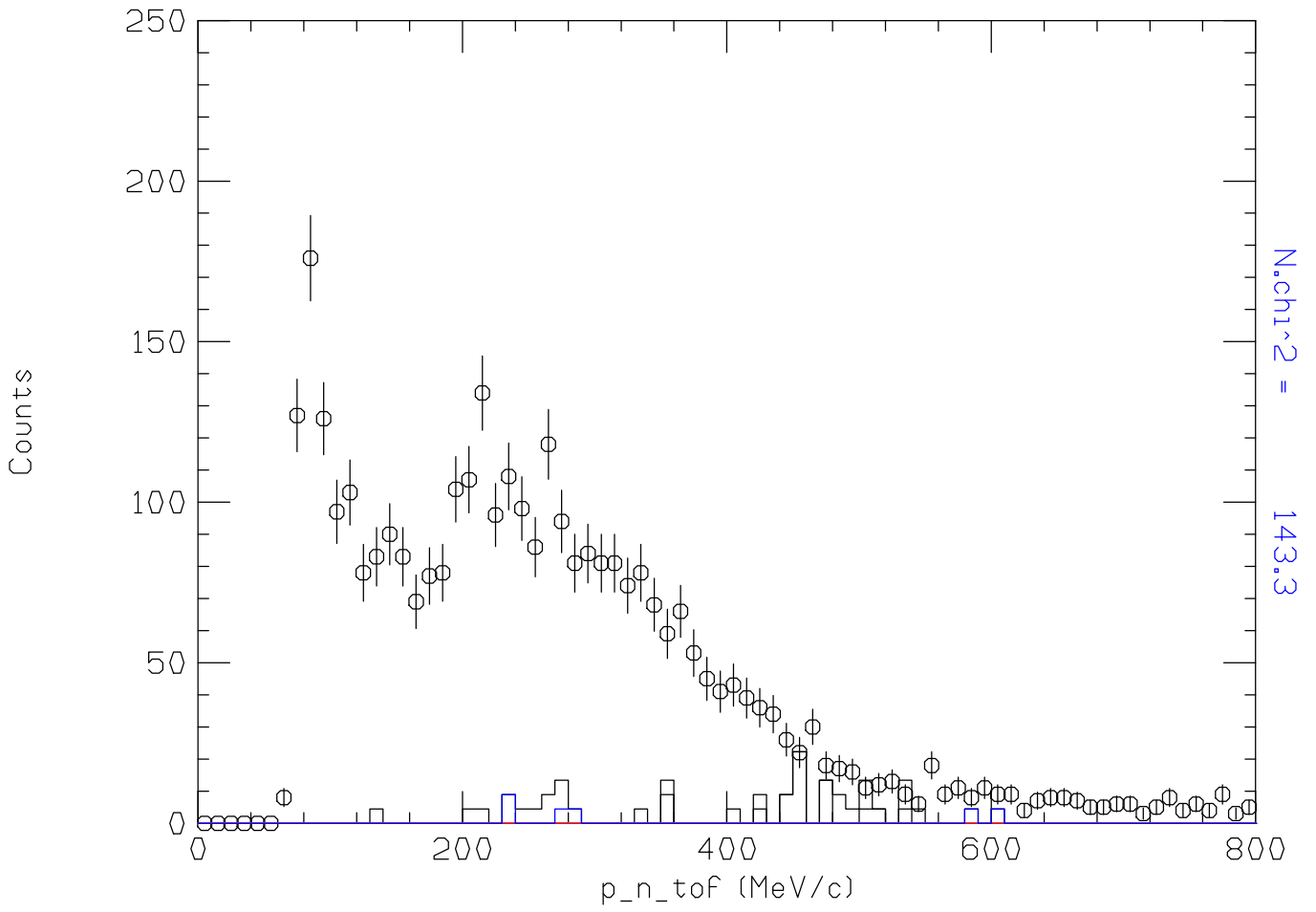
6000: p1: n eff & TRG=MS\_vfast\_p1 & -60<v\_CA\*v\_n<-5



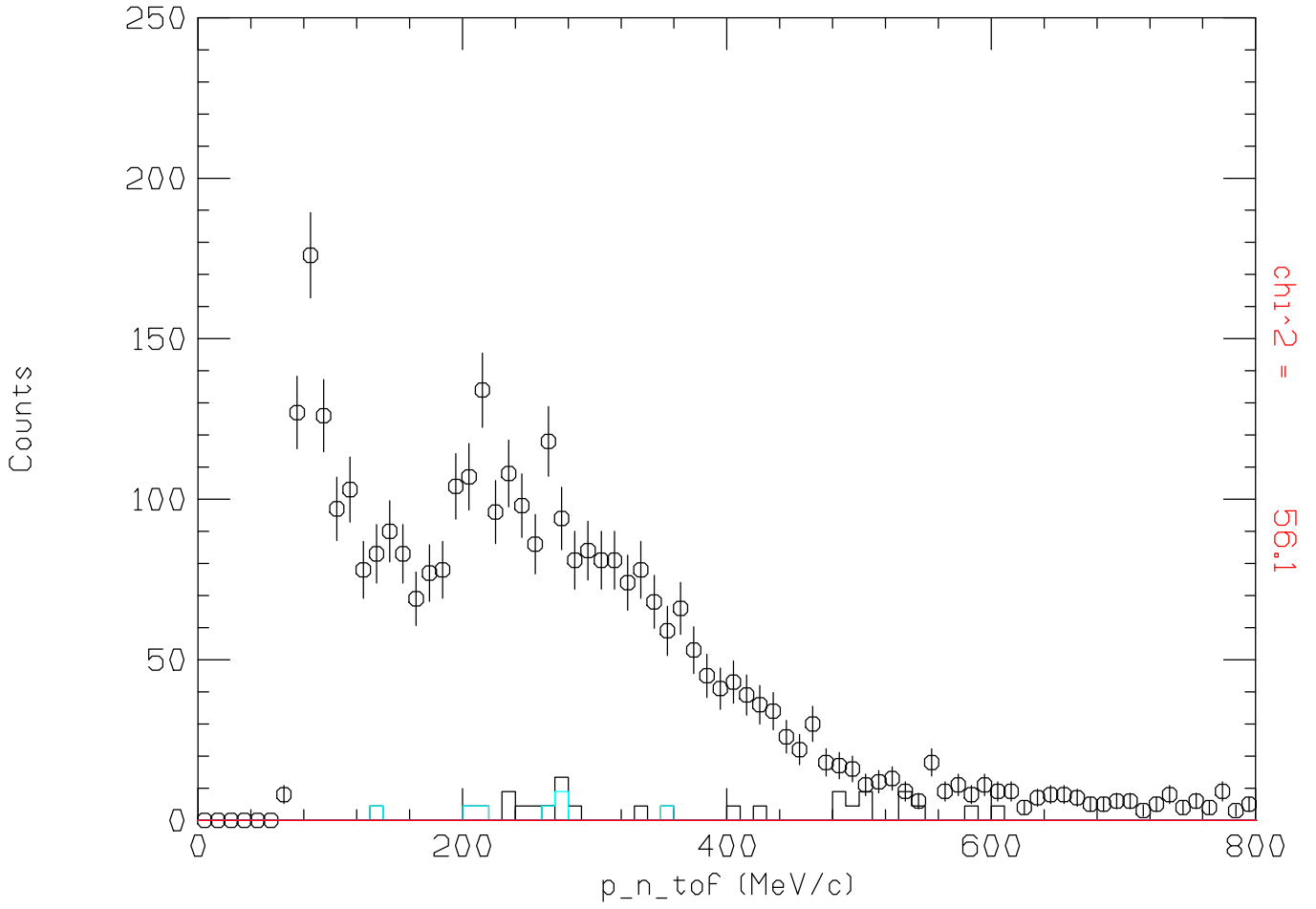
6010: p2: n eff & TRG=MS\_vfast\_p1 & -60 < v\_CA \* v\_n < -5



6020: p1: n eff & TRG=MS\_vfast\_p1 & -5<v\_CA\*v\_n<5

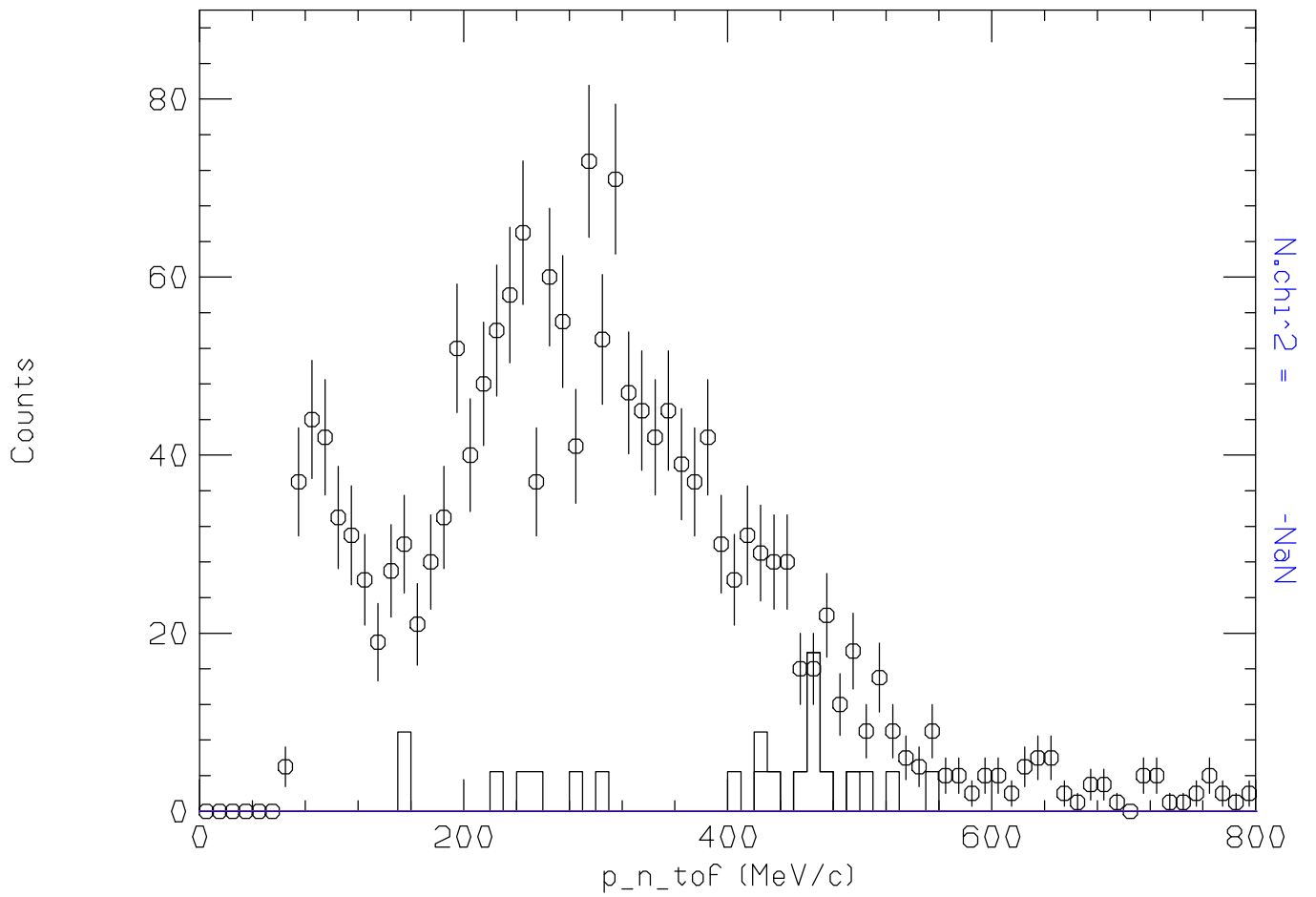


6030: p2: n eff & TRG=MS\_vfast\_p1 & -5<v\_CA\*v\_n<5

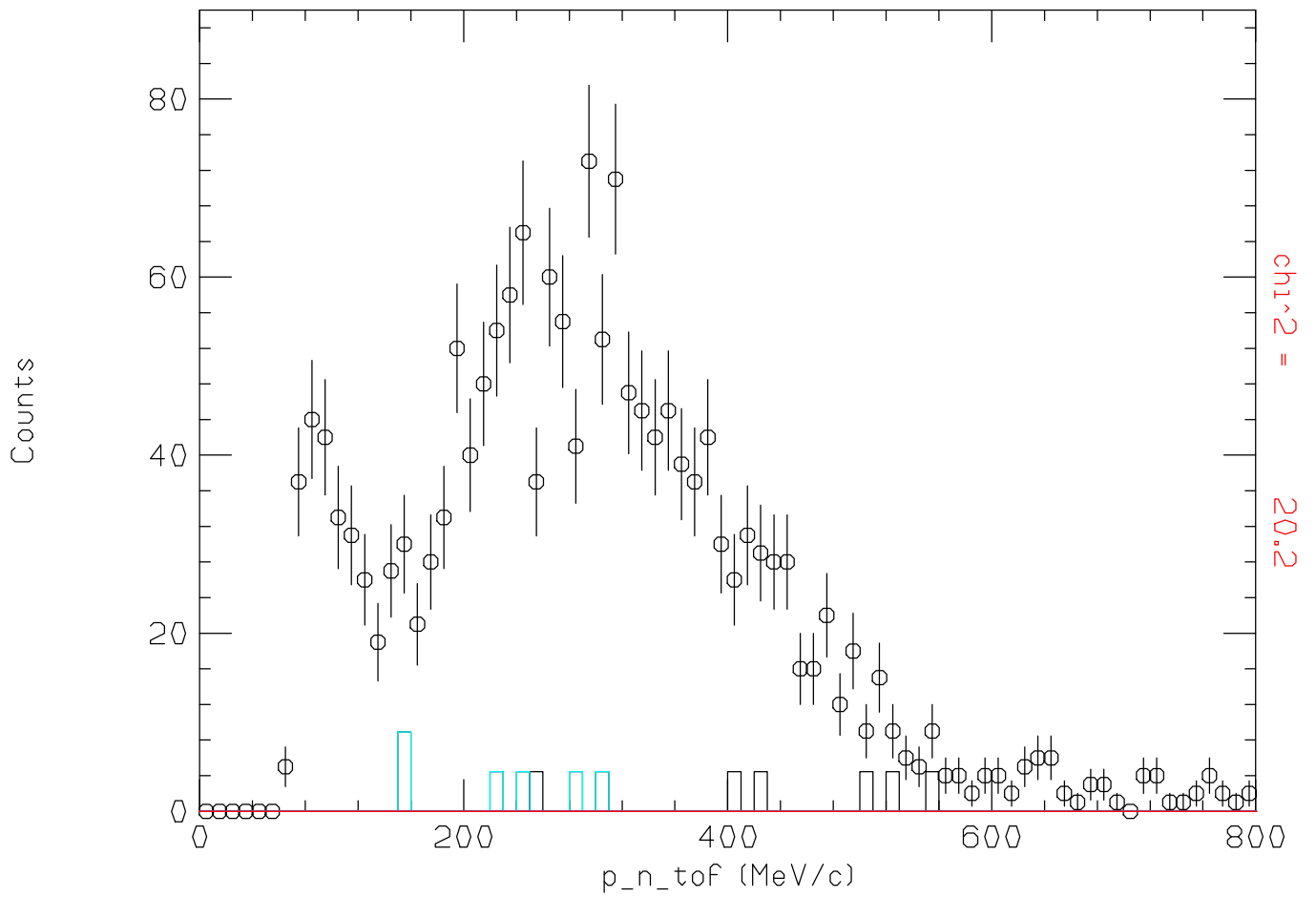




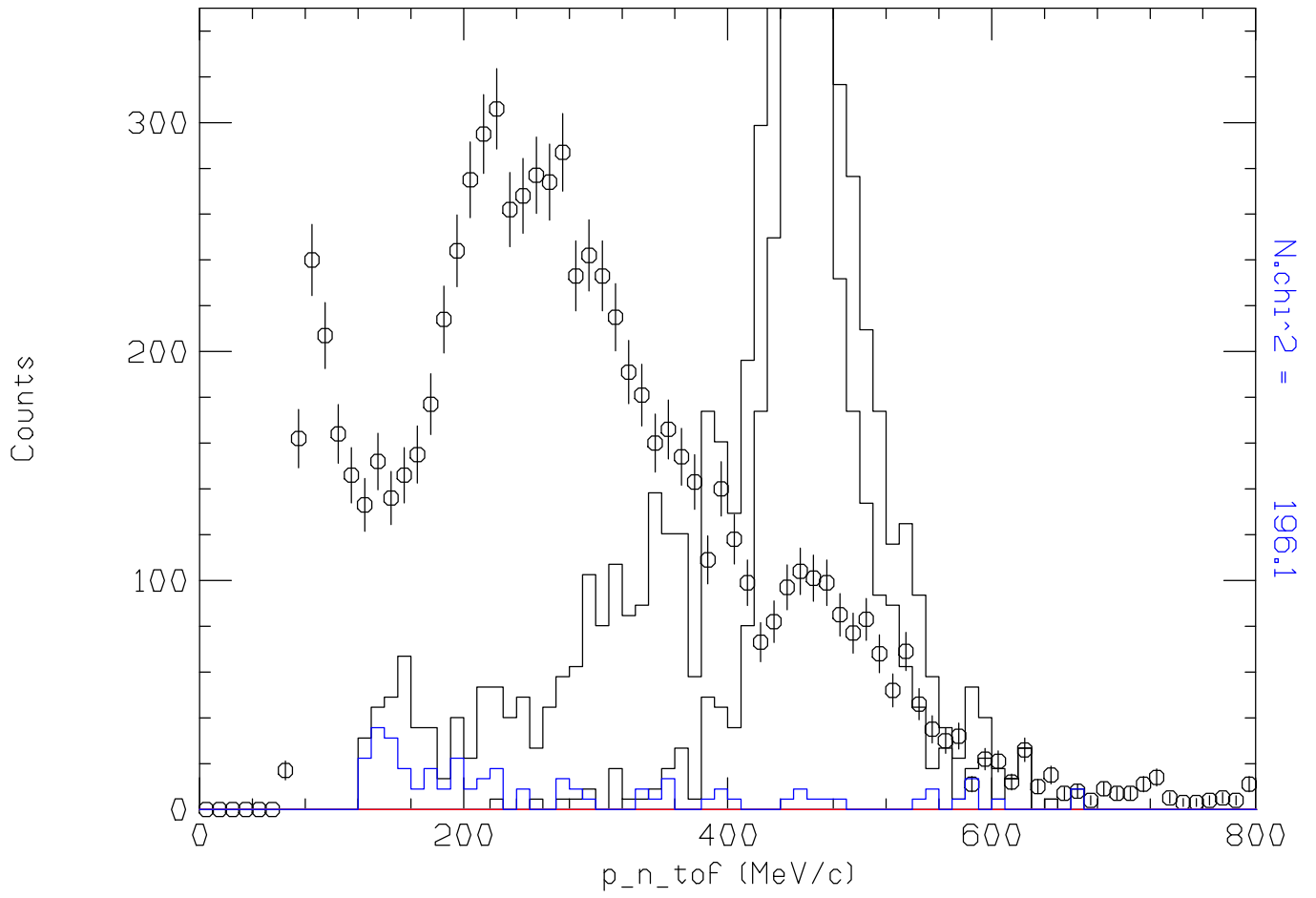
6040: p1: n eff & TRG=MS\_vfast\_p1 & 5<v\_CA\*v\_n<60



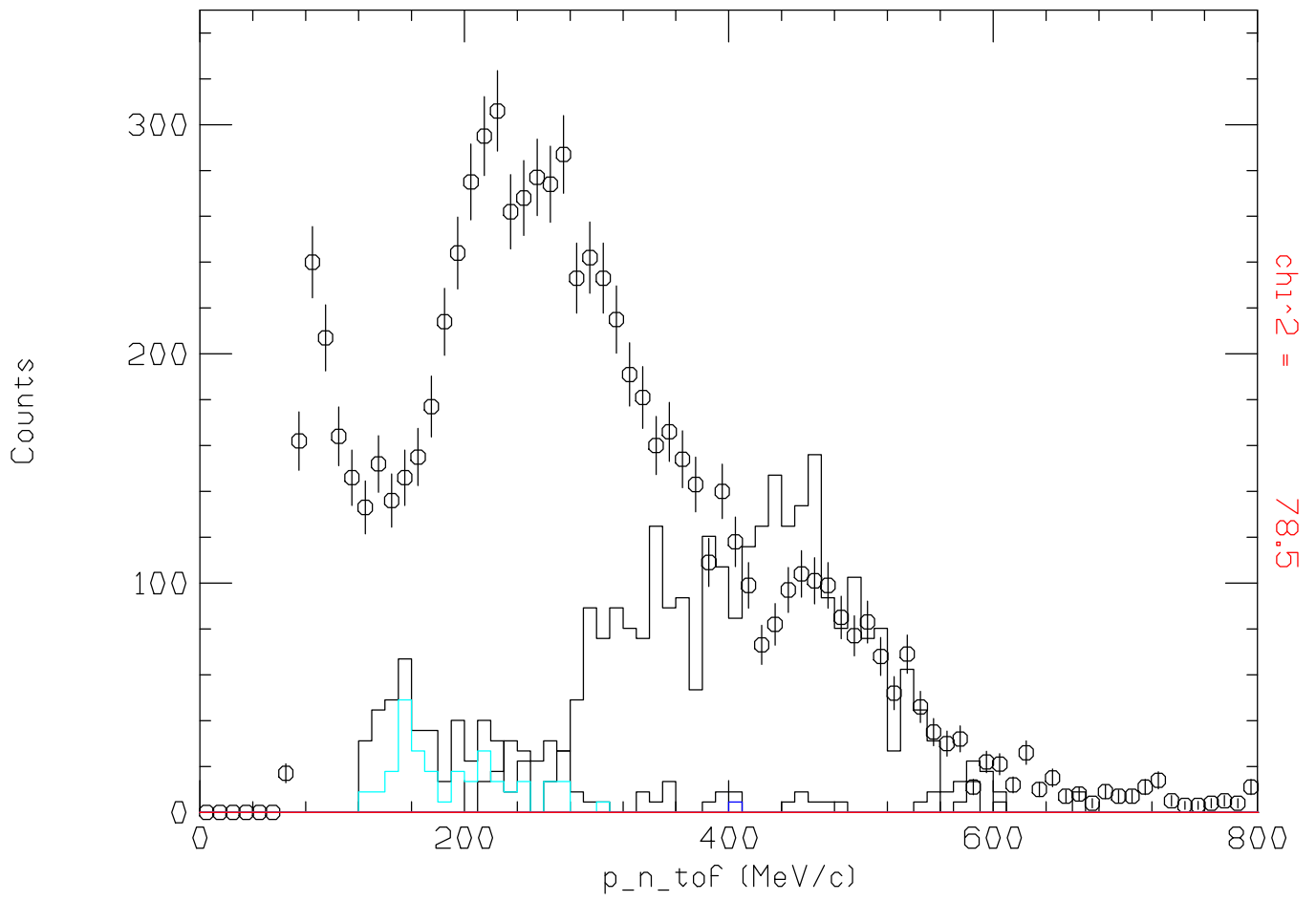
6050: p2: n eff & TRG=MS\_vfast\_p1 & 5<v\_CA\*v\_n<60



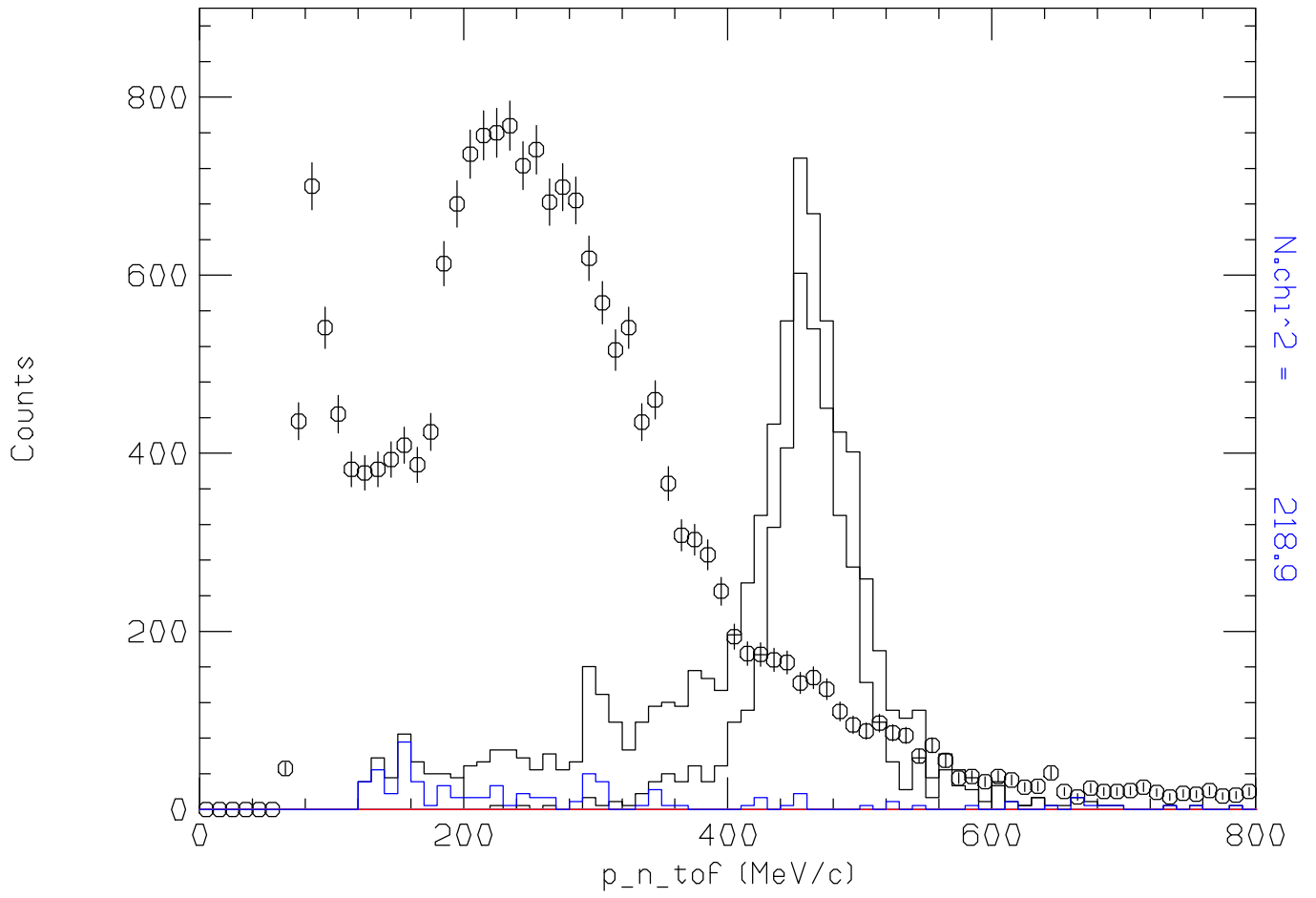
6060: p1: n eff & TRG=MS\_fast\_p1 & -60<v\_CA\*v\_n<-5



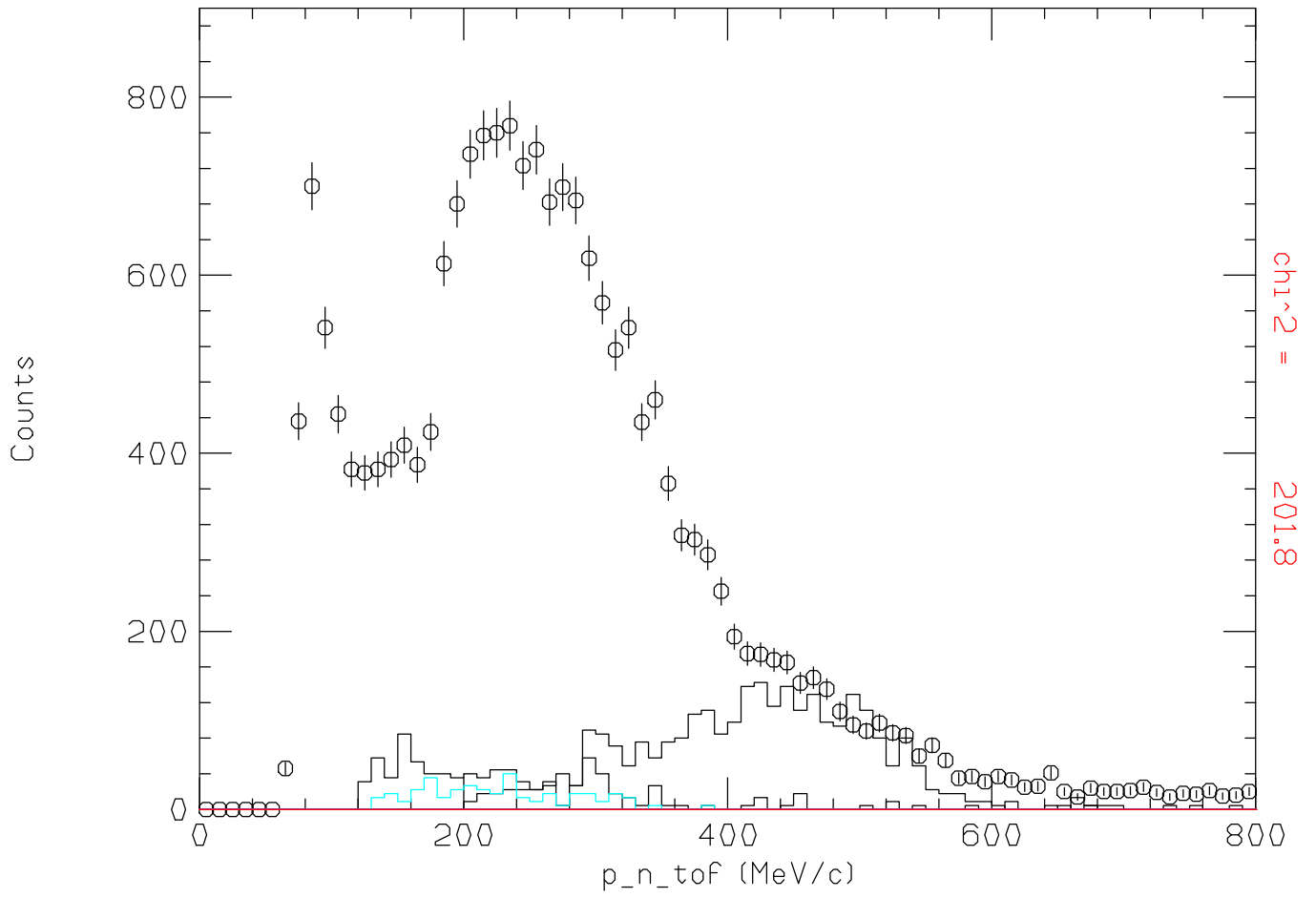
6070: p2: n eff & TRG=MS\_fast\_p1 &  $-60 < v_{CA} * v_n < -5$



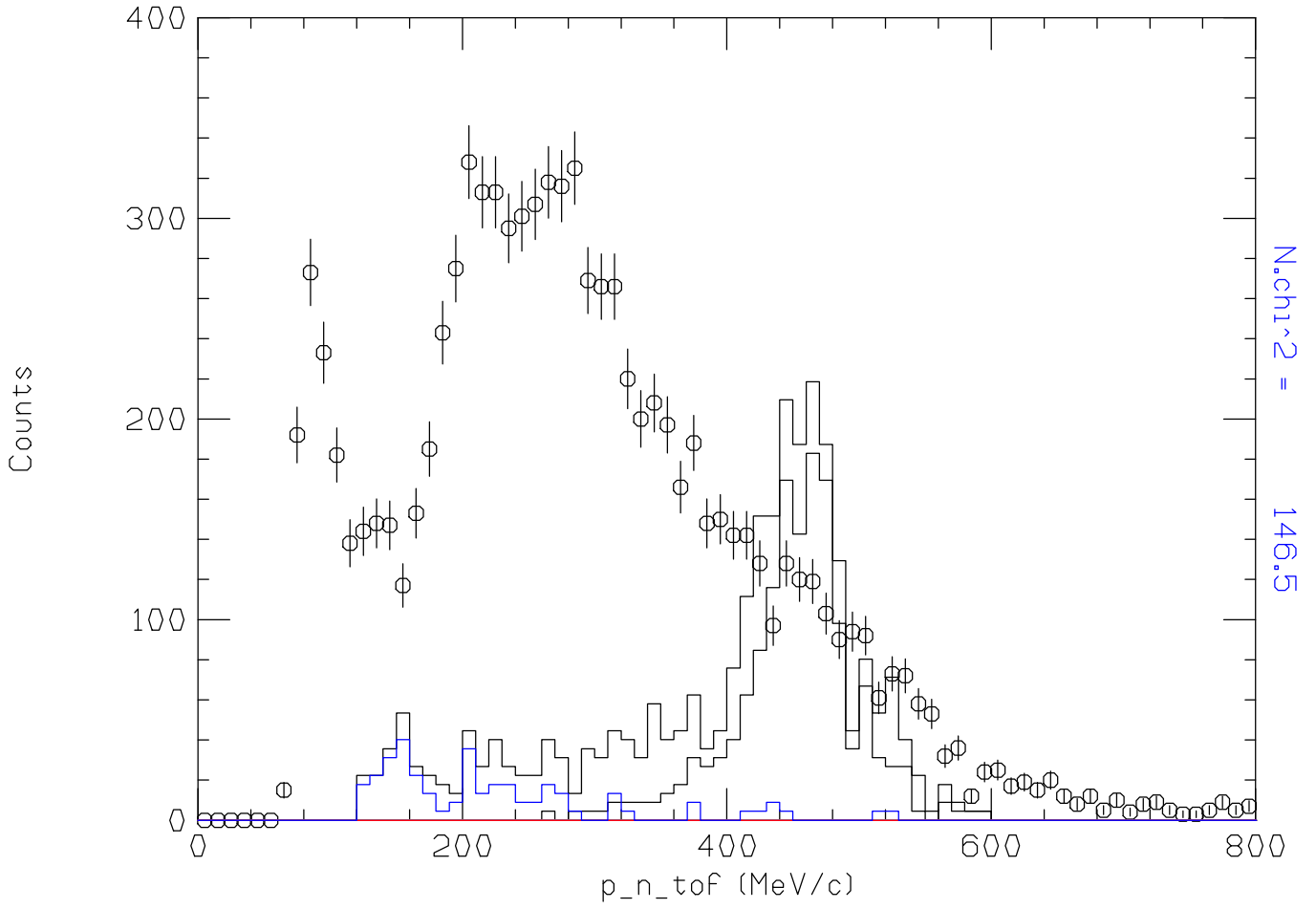
6080: p1: n eff & TRG=MS\_fast\_p1 & -5<v\_CA\*v\_n<5



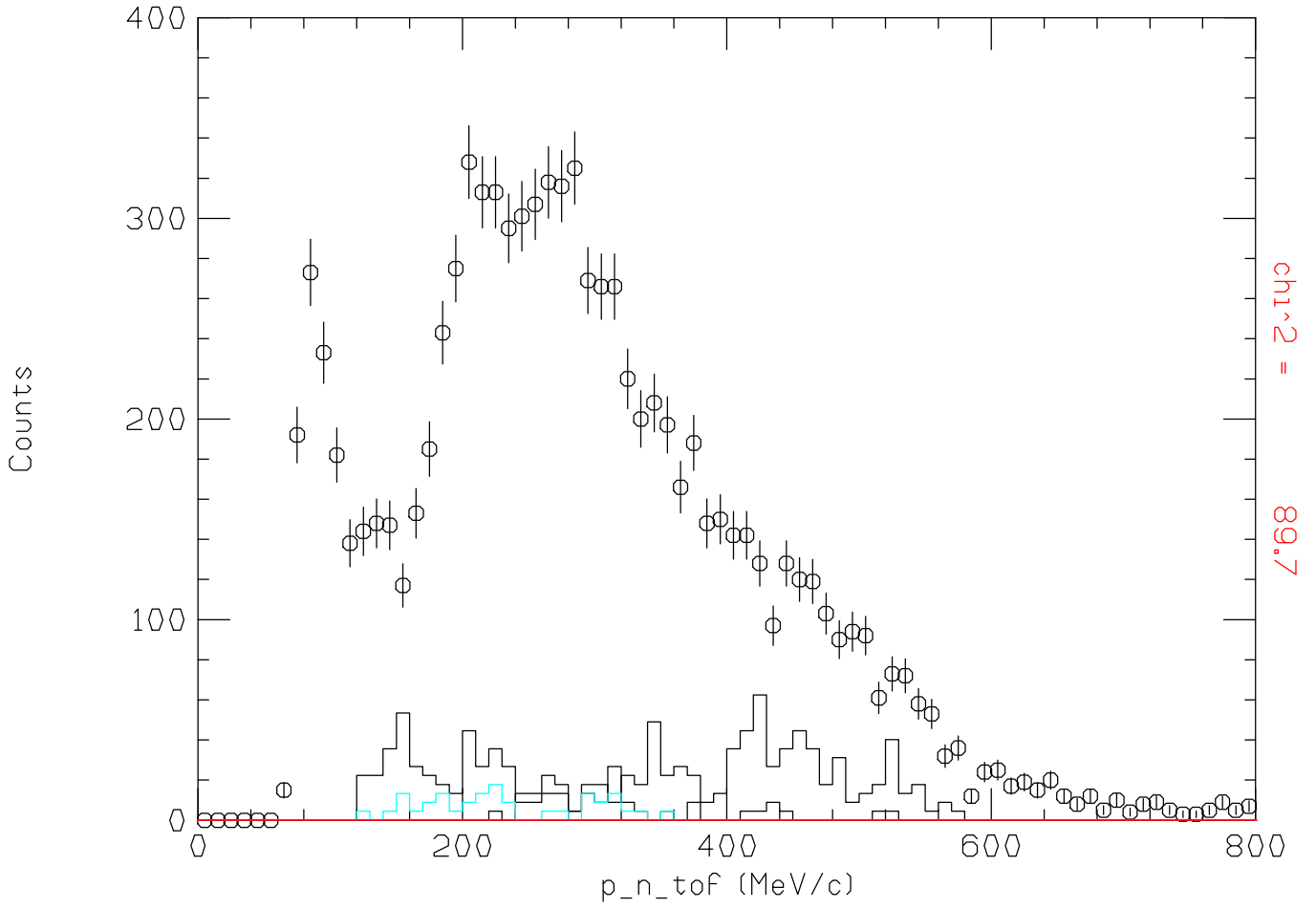
6090: p2: n eff & TRG=MS\_fast\_p1 & -5<v\_CA\*v\_n<5



6100: p1: n eff & TRG=MS\_fast\_p1 & 5<v\_CA\*v\_n<60

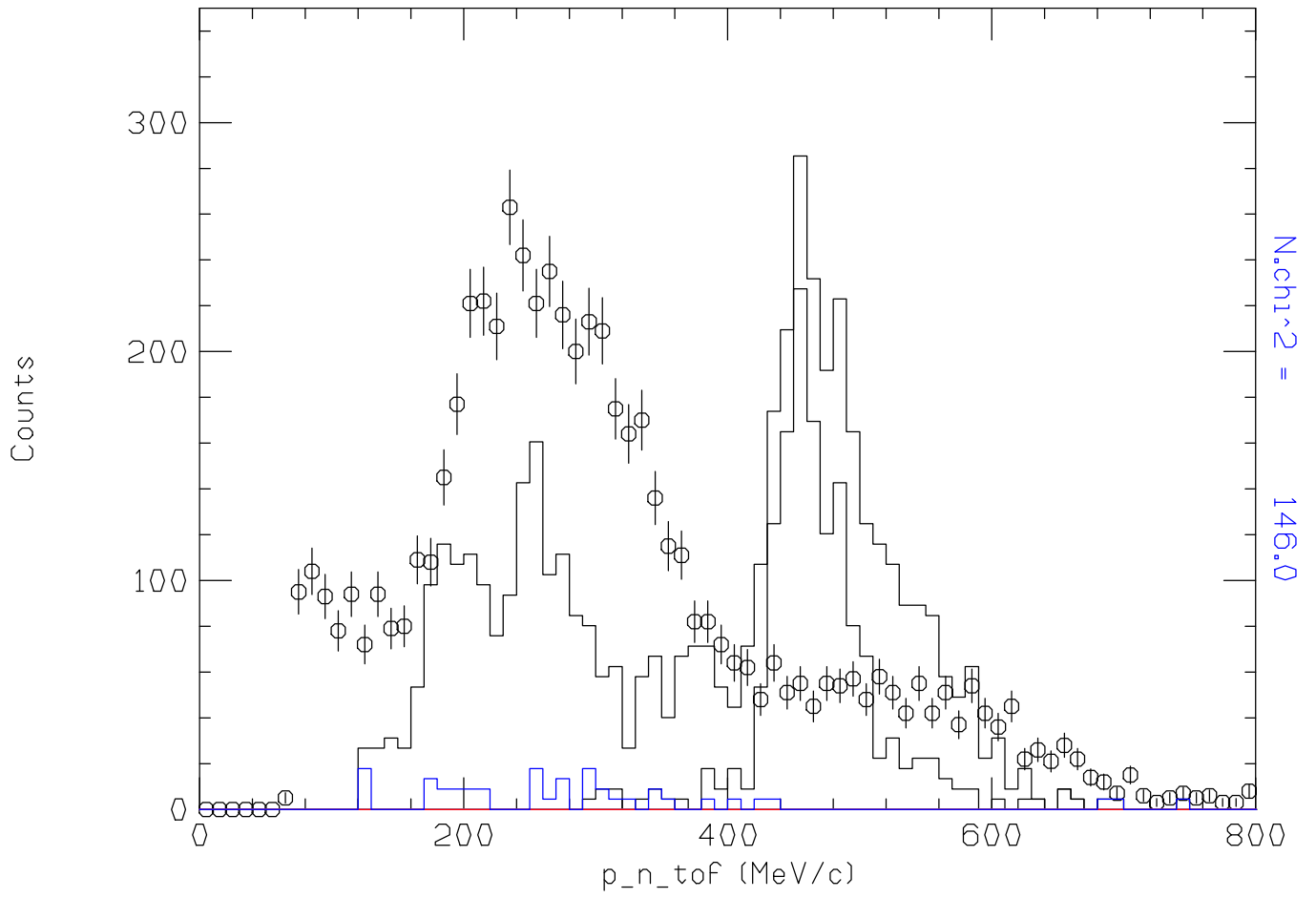


6110: p2: n eff & TRG=MS\_fast\_p1 & 5<v\_CA\*v\_n<60

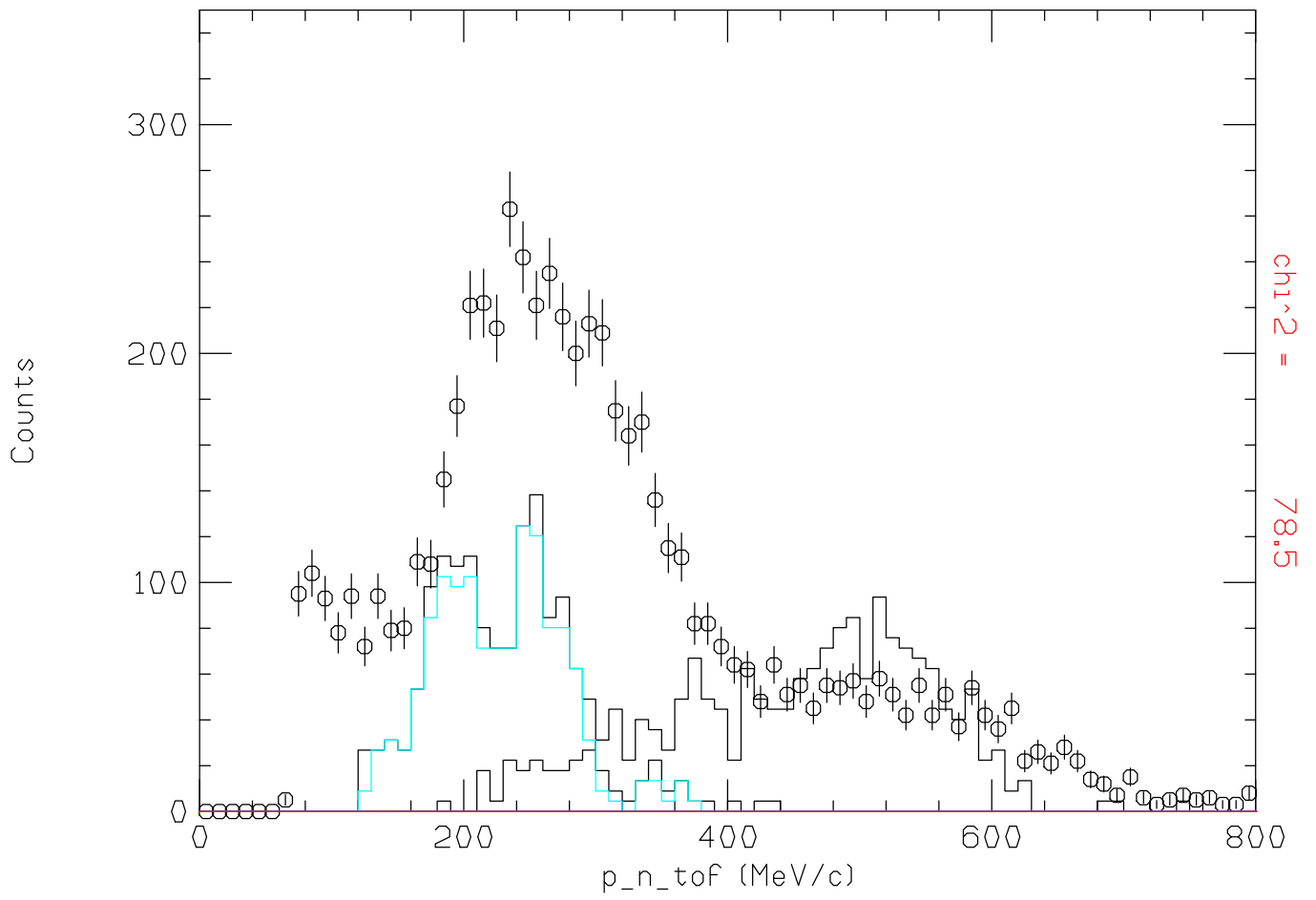




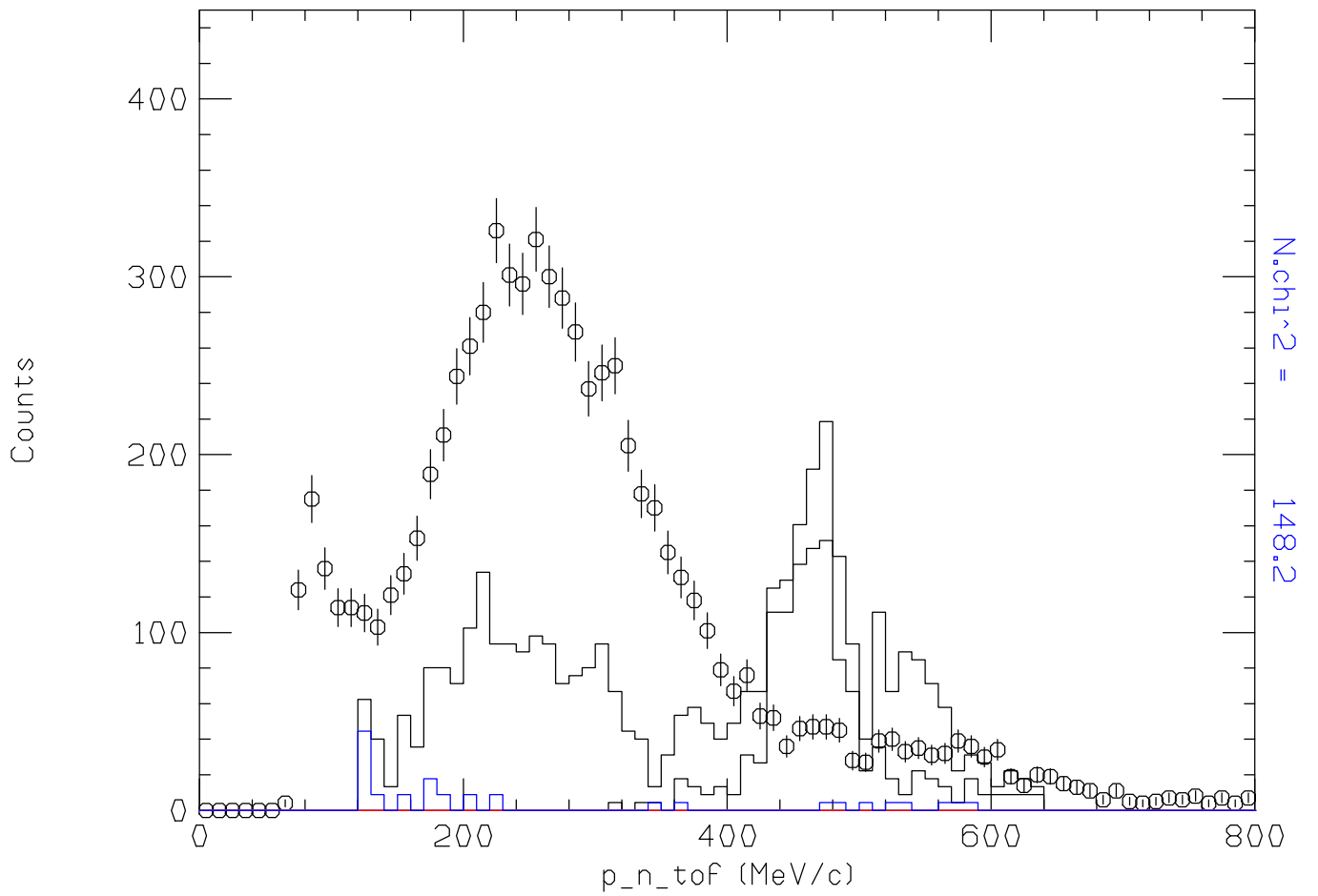
6120: p1: n eff & TRG=MS\_slow\_p1 & -60 < v\_CA \* v\_n < -5



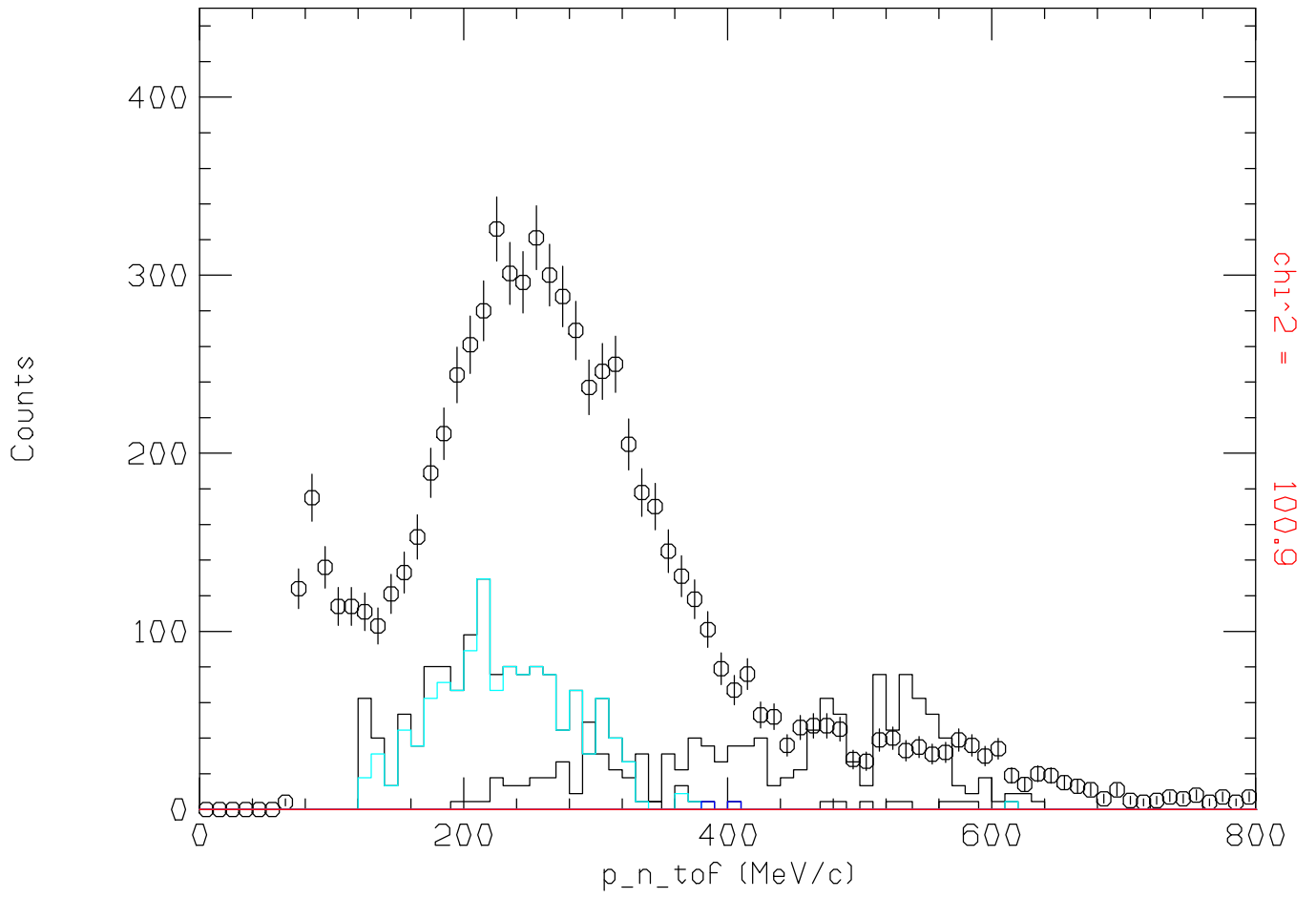
6130: p2: n eff & TRG=MS\_slow\_p1 & -60 < v\_CA \* v\_n < -5



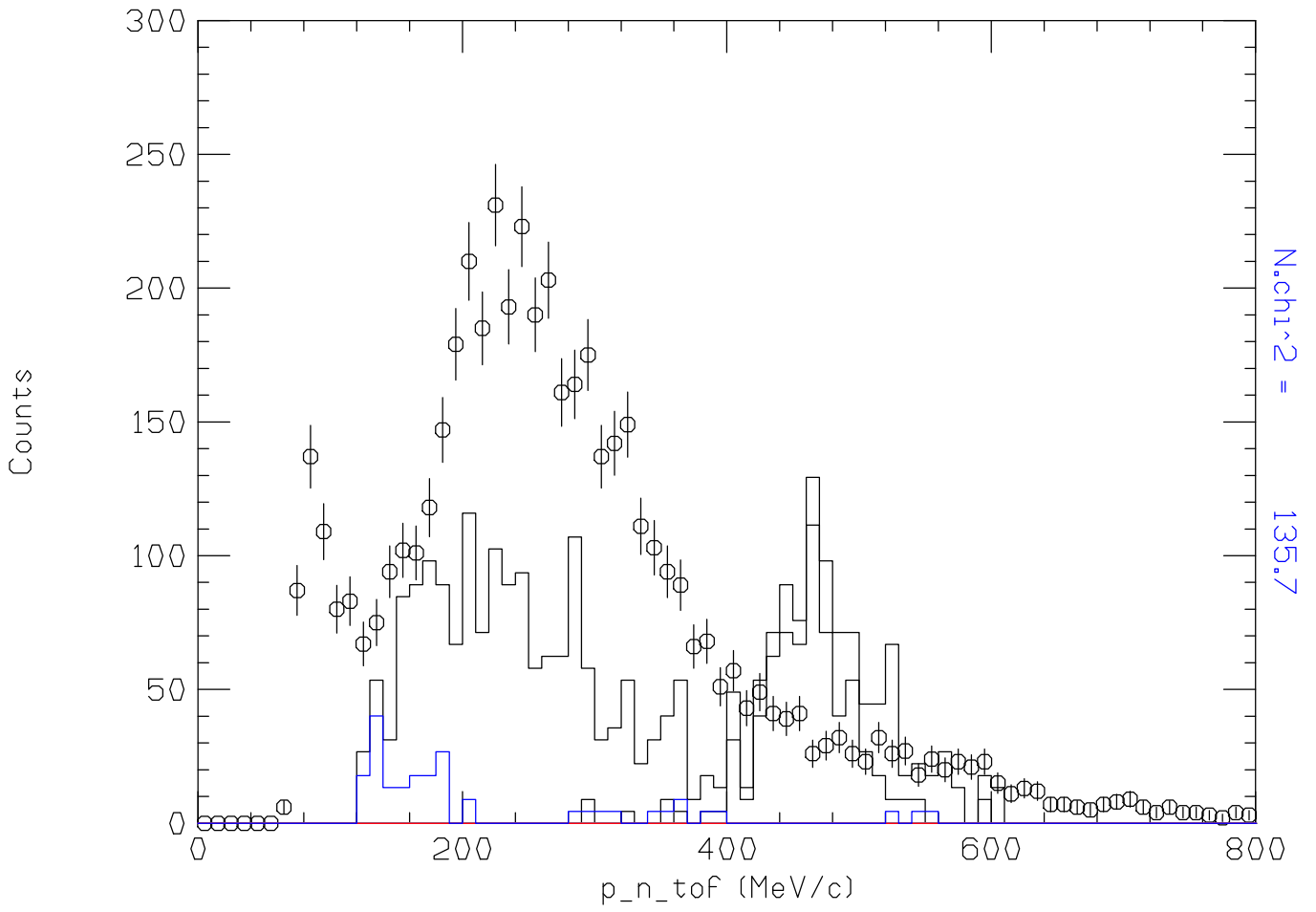
6140: p1: n eff & TRG=MS\_slow\_p1 & -5<v\_CA\*v\_n<5



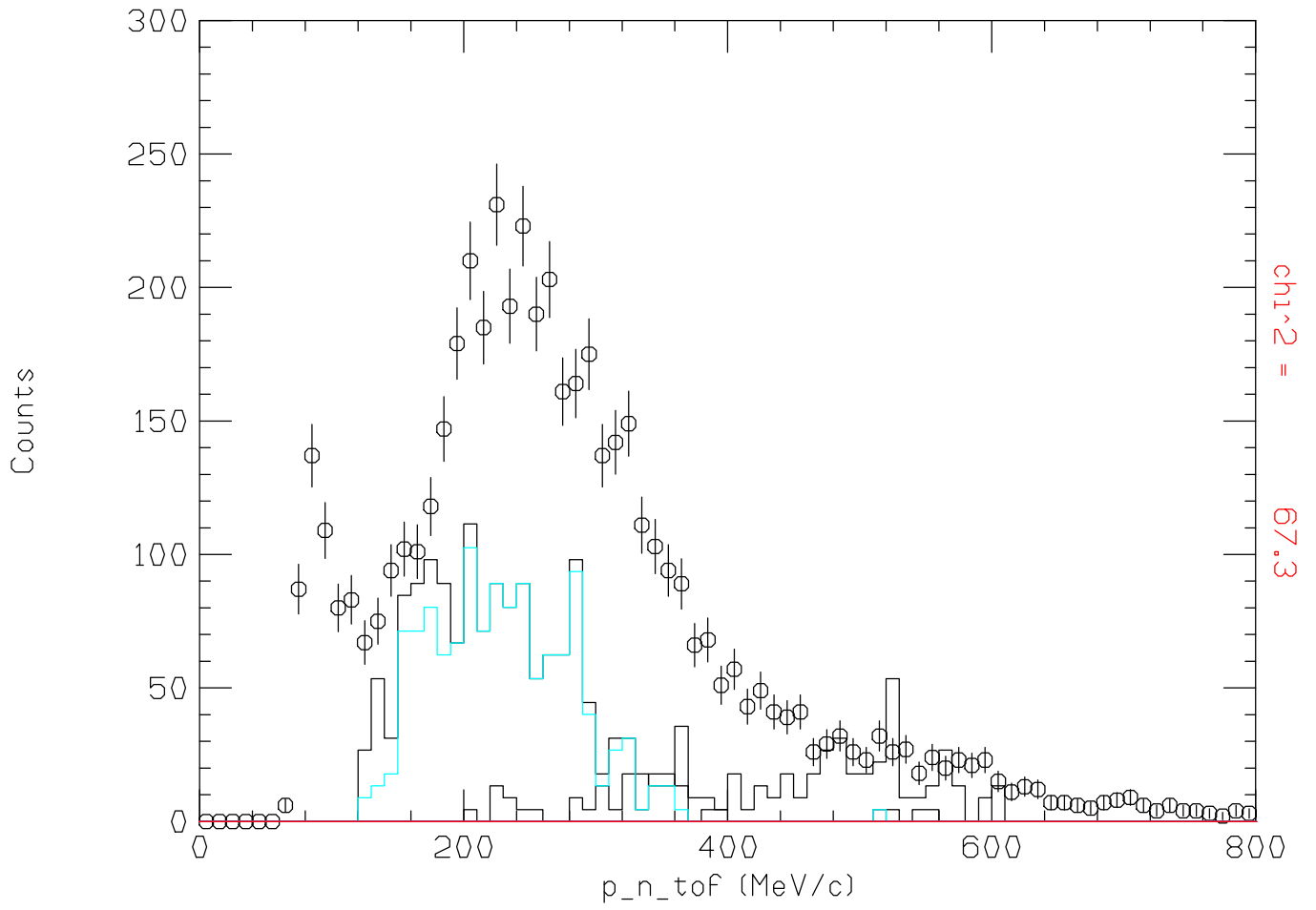
6150: p2: n eff & TRG=MS\_slow\_p1 & -5<v\_CA\*v\_n<5



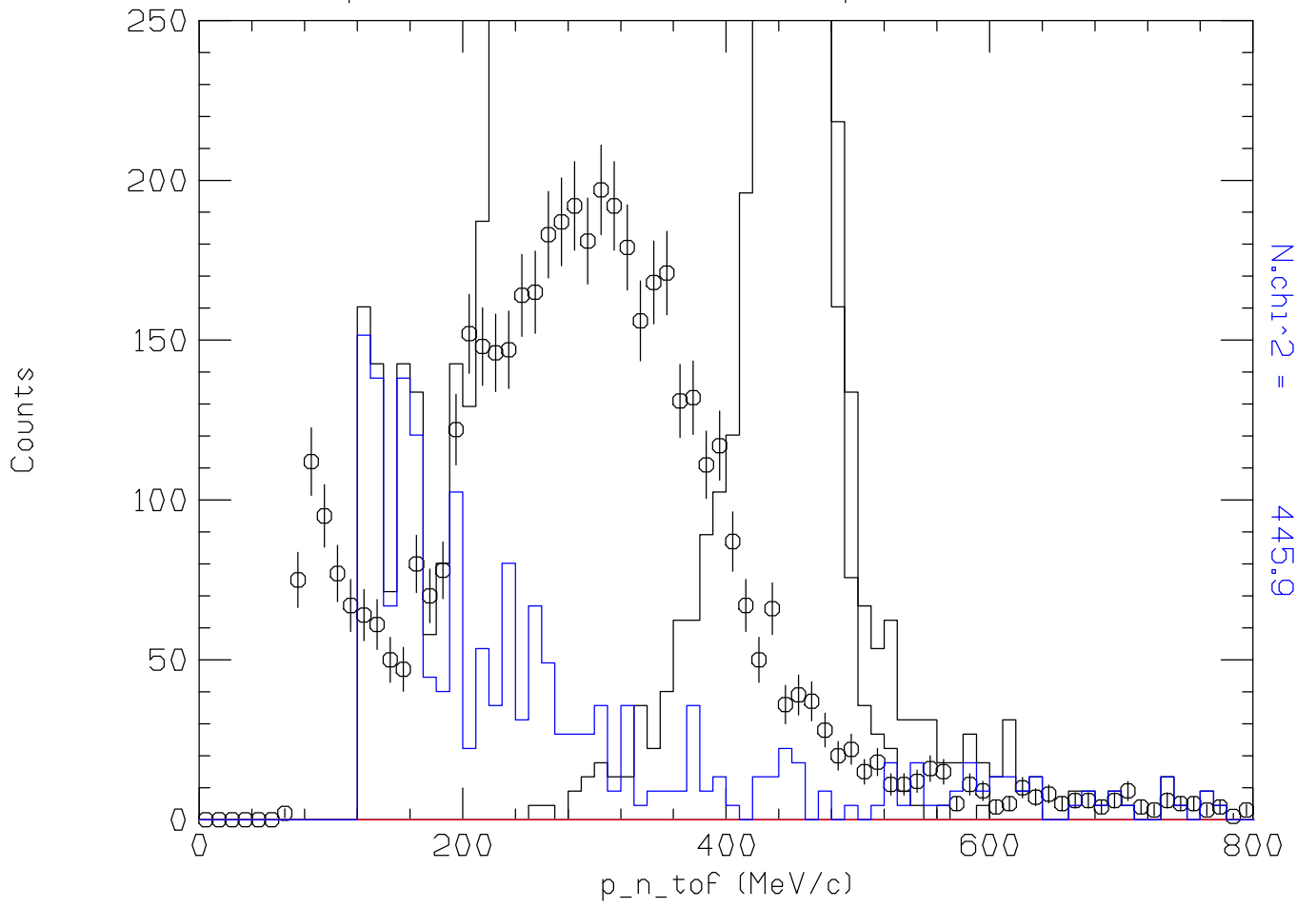
6160: p1: n eff & TRG=MS\_slow\_p1 & 5<v\_CA\*v\_n<60



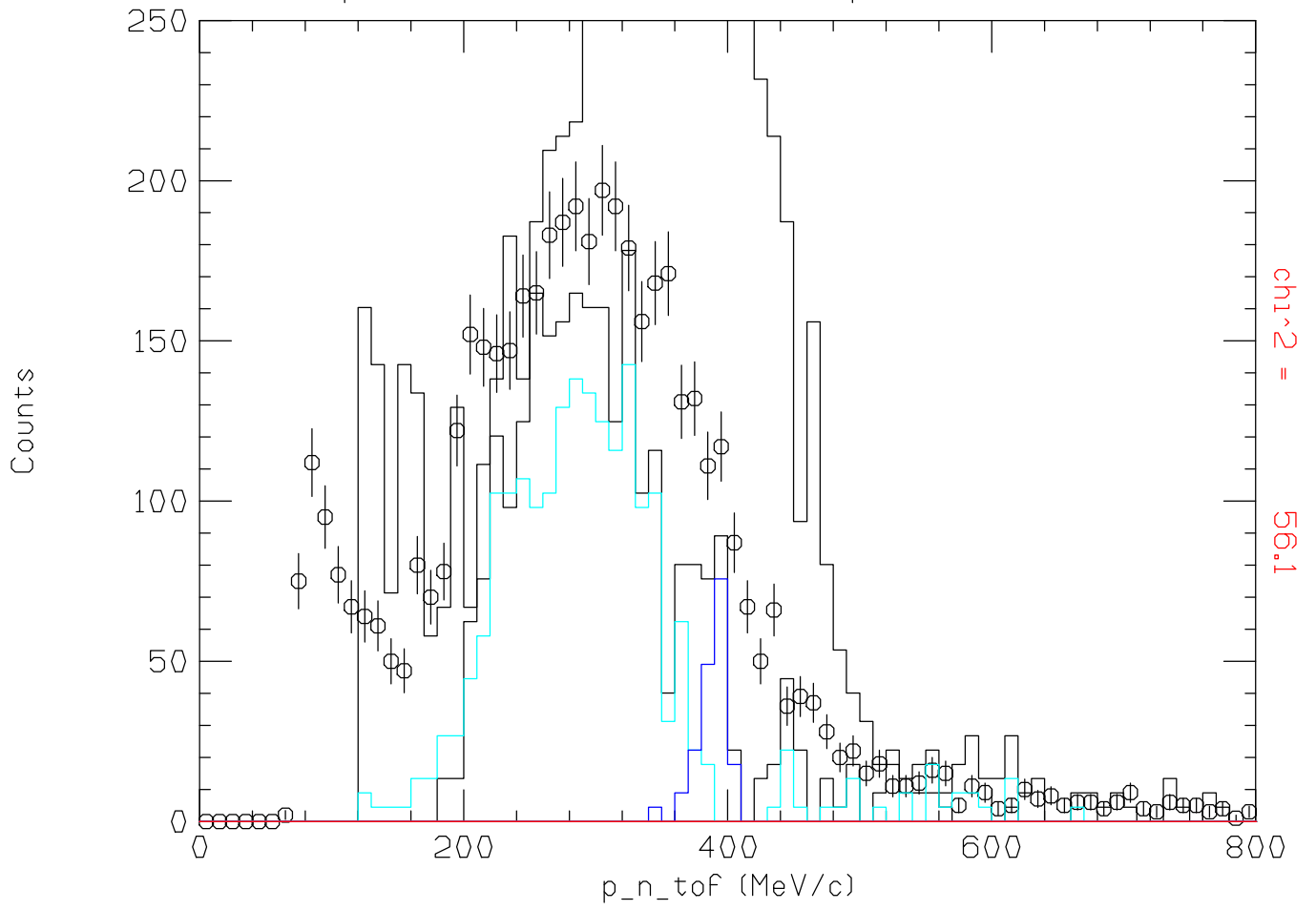
6170: p2: n eff & TRG=MS\_slow\_p1 & 5<v\_CA\*v\_n<60



6180: p1: n eff & TRG=MS\_proton & forward

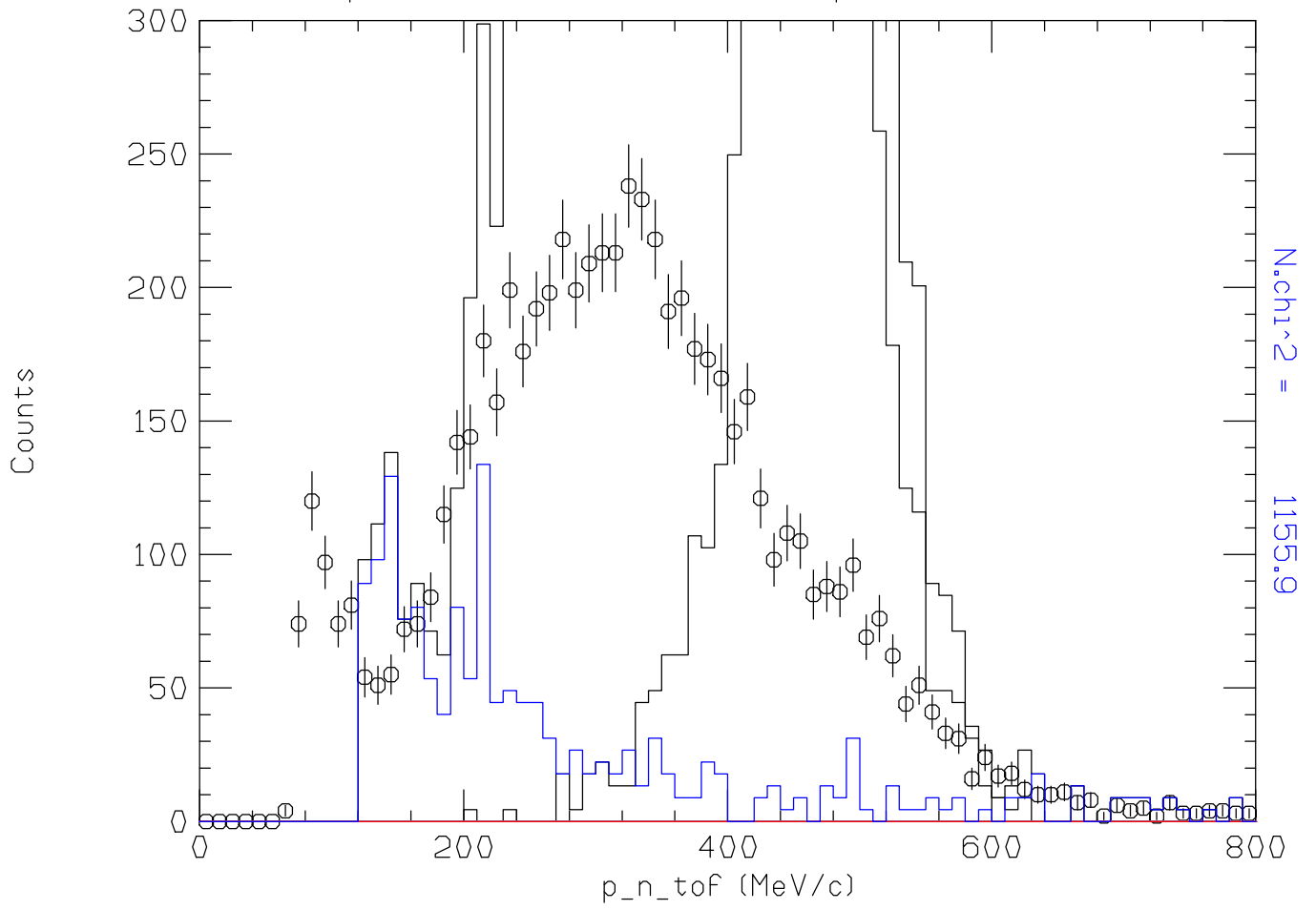


6190: p2: n eff & TRG=MS\_proton & forward

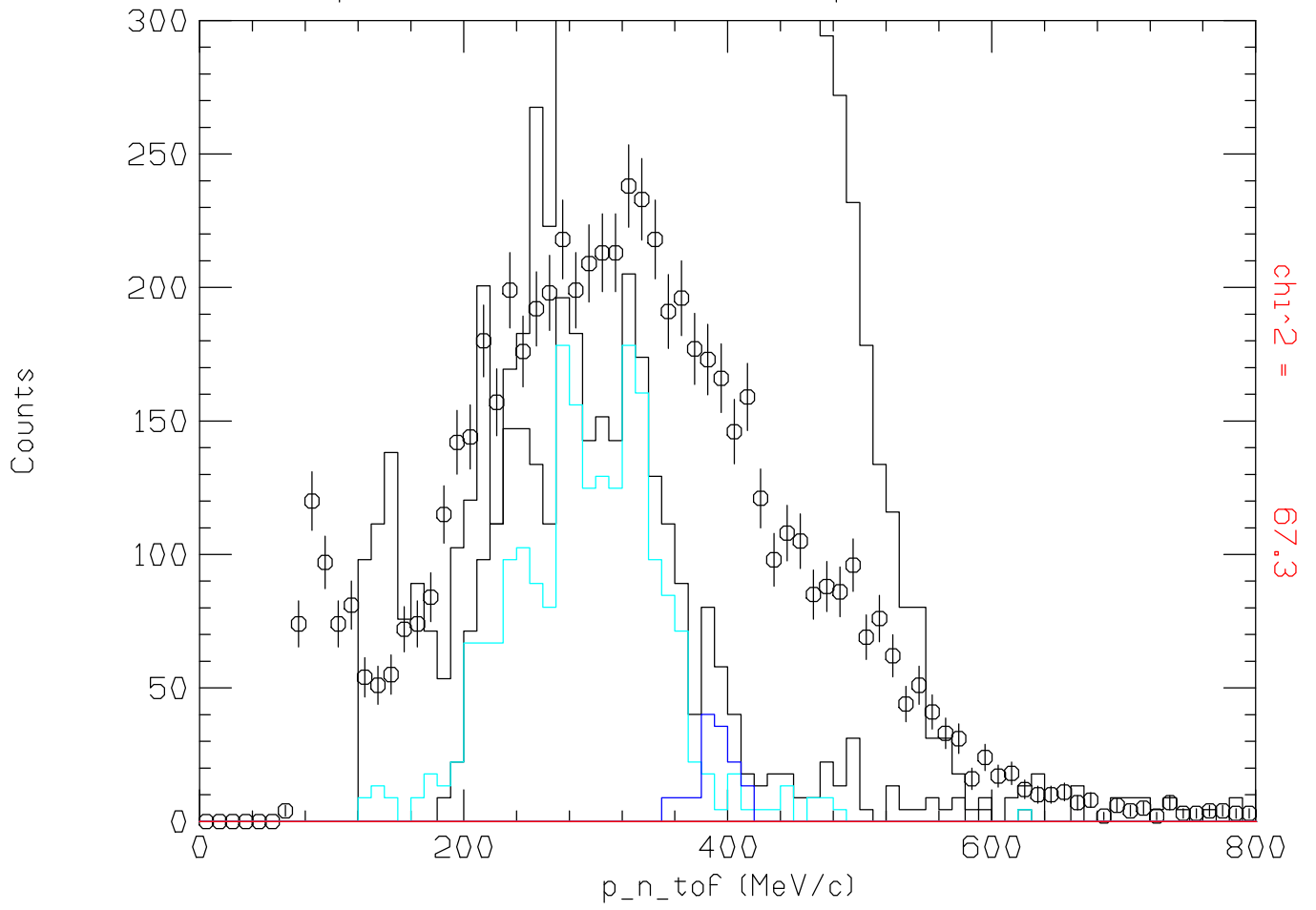




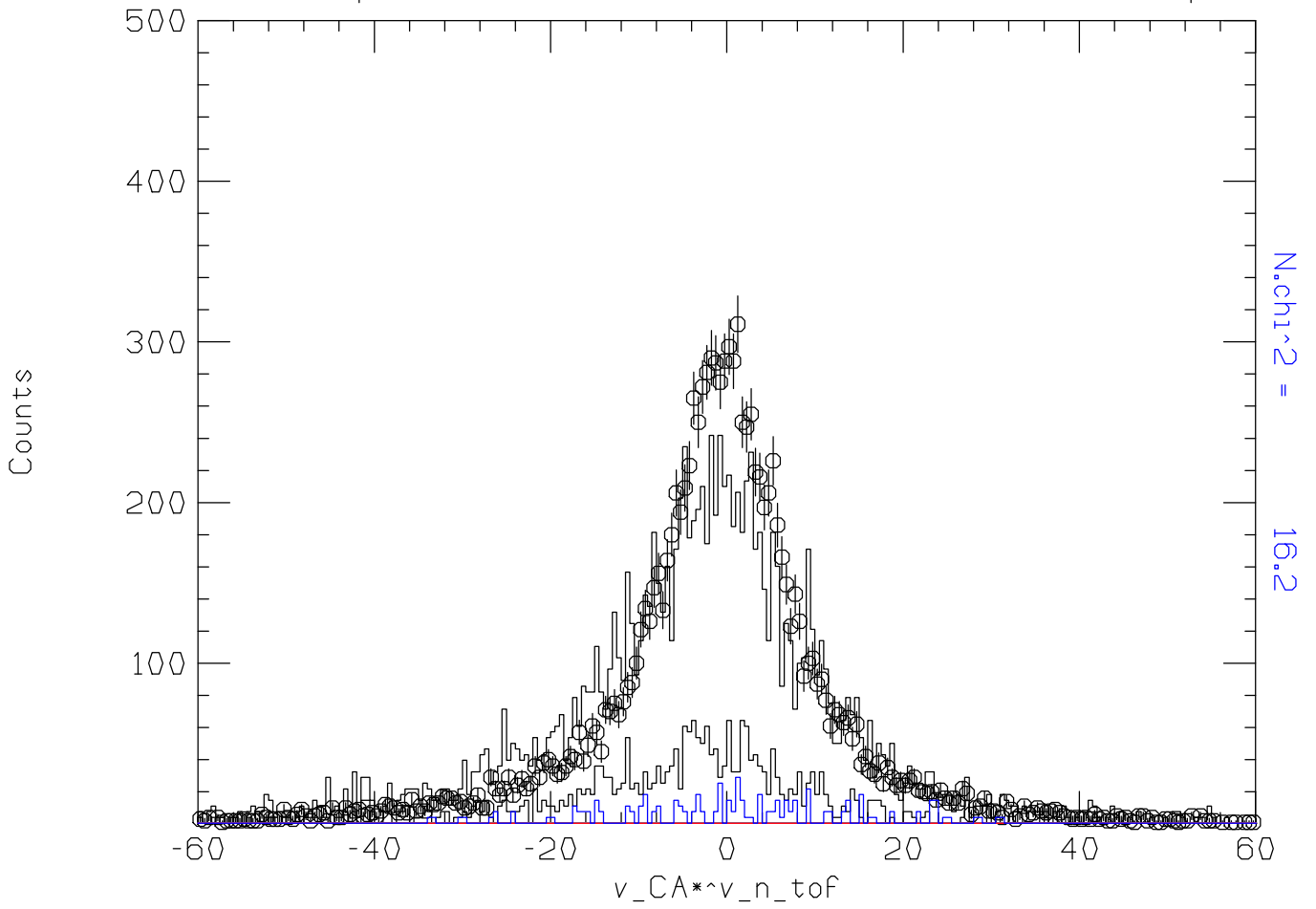
6200: p1: n eff & TRG=MS\_proton & backward



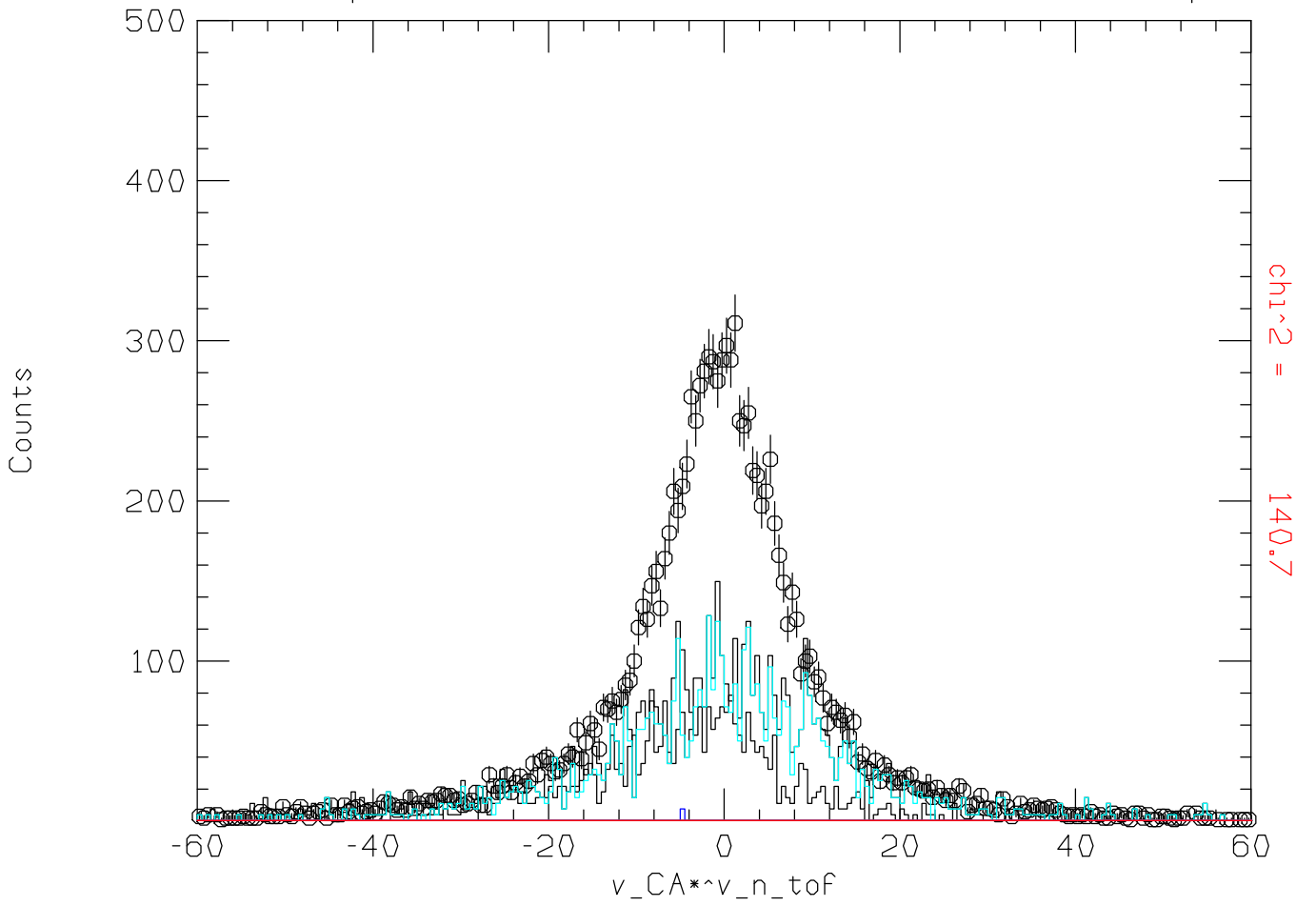
6210: p2: n eff & TRG=MS\_proton & backward



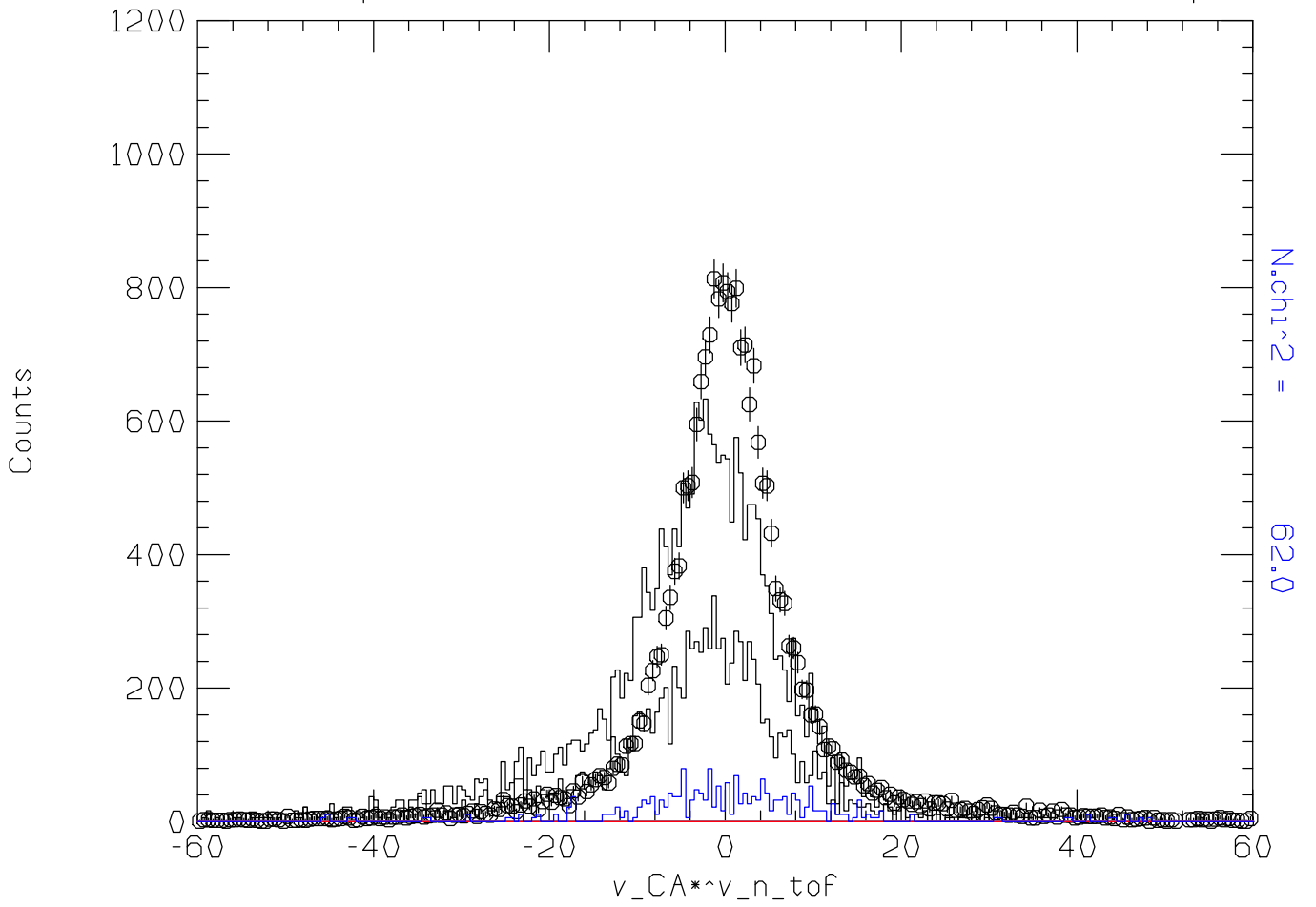
2120: p1: v\_CA\*^v\_n\_tof : TRG=MS\_slow\_p1



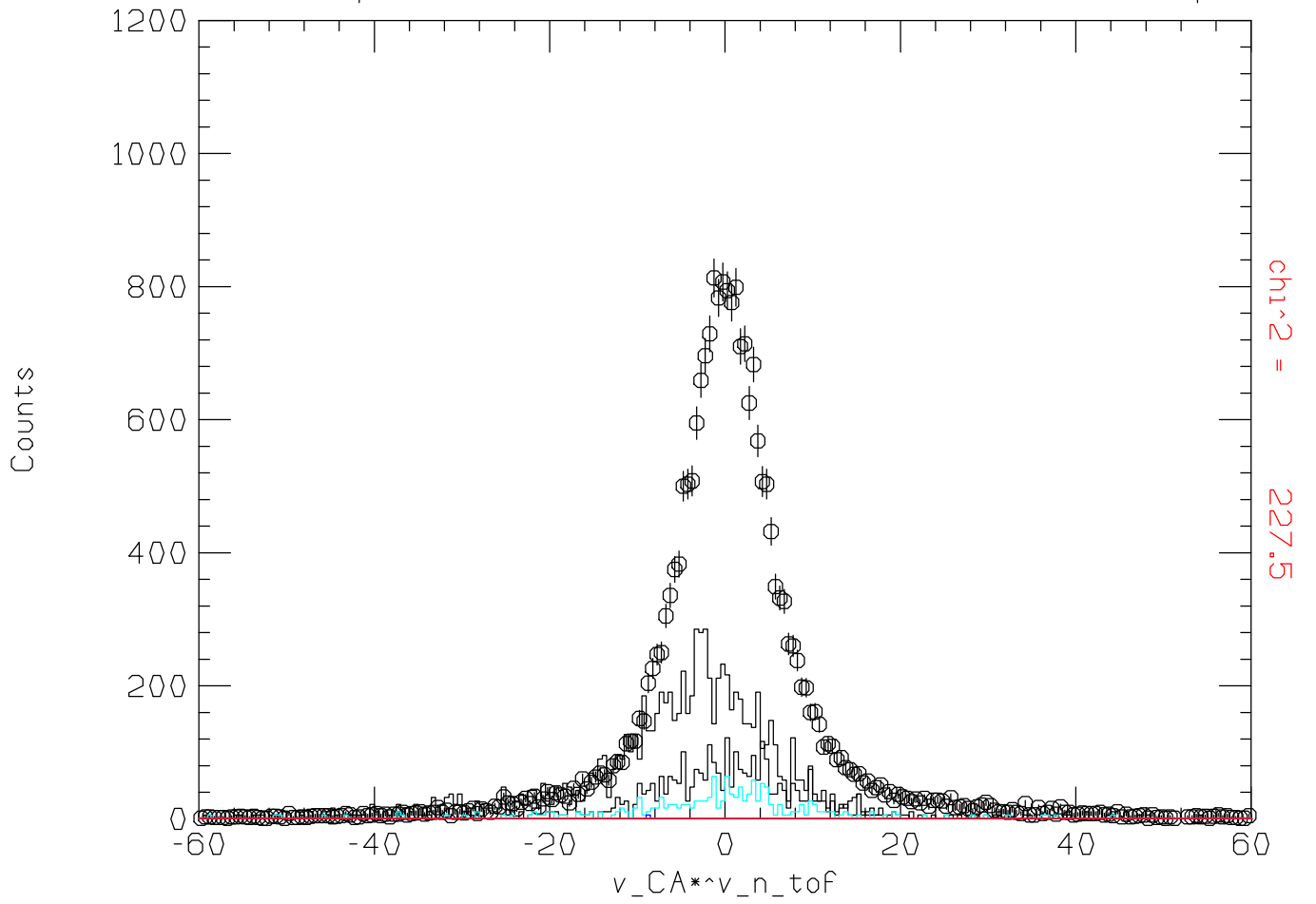
2130: p2: v\_CA\*^v\_n\_tof : TRG=MS\_slow\_p1



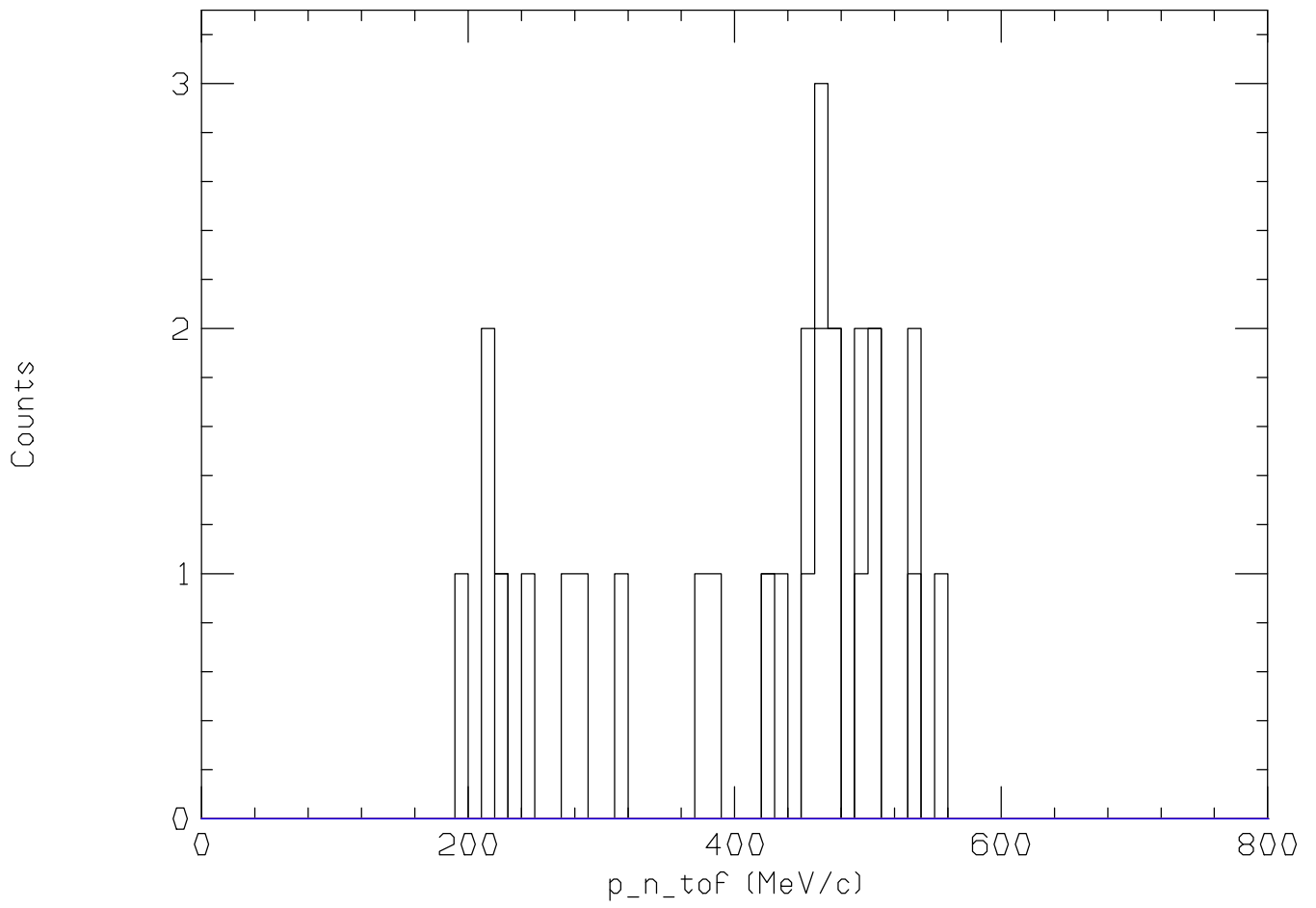
2040: p1: v\_CA\*^v\_n\_tof : TRG=MS\_fast\_p1



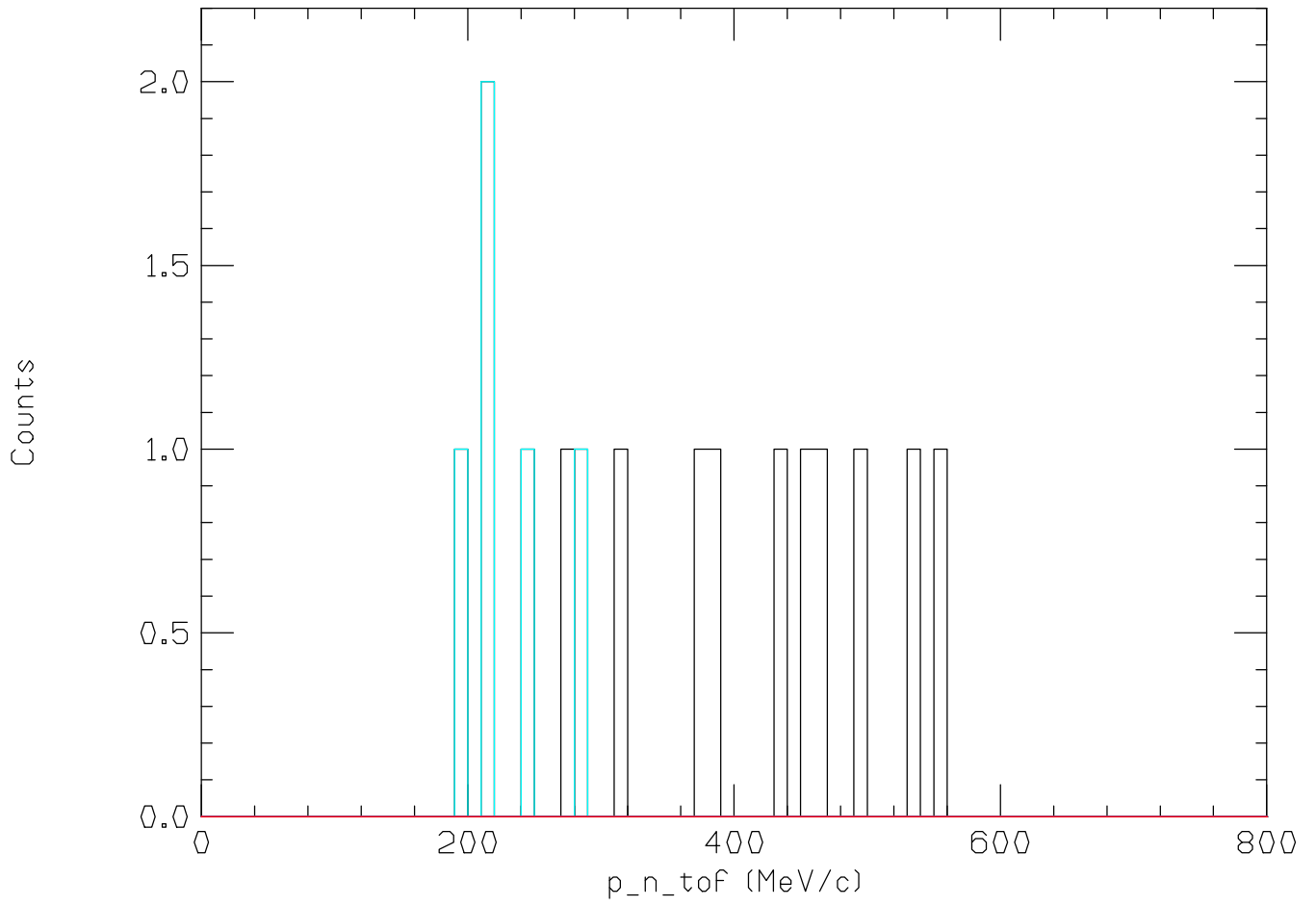
2050: p2: v\_CA\*^v\_n\_tof : TRG=MS\_fast\_p1



6000: p1: n eff & TRG=MS\_vfast\_p1 & -60<v\_CA\*v\_n<-5

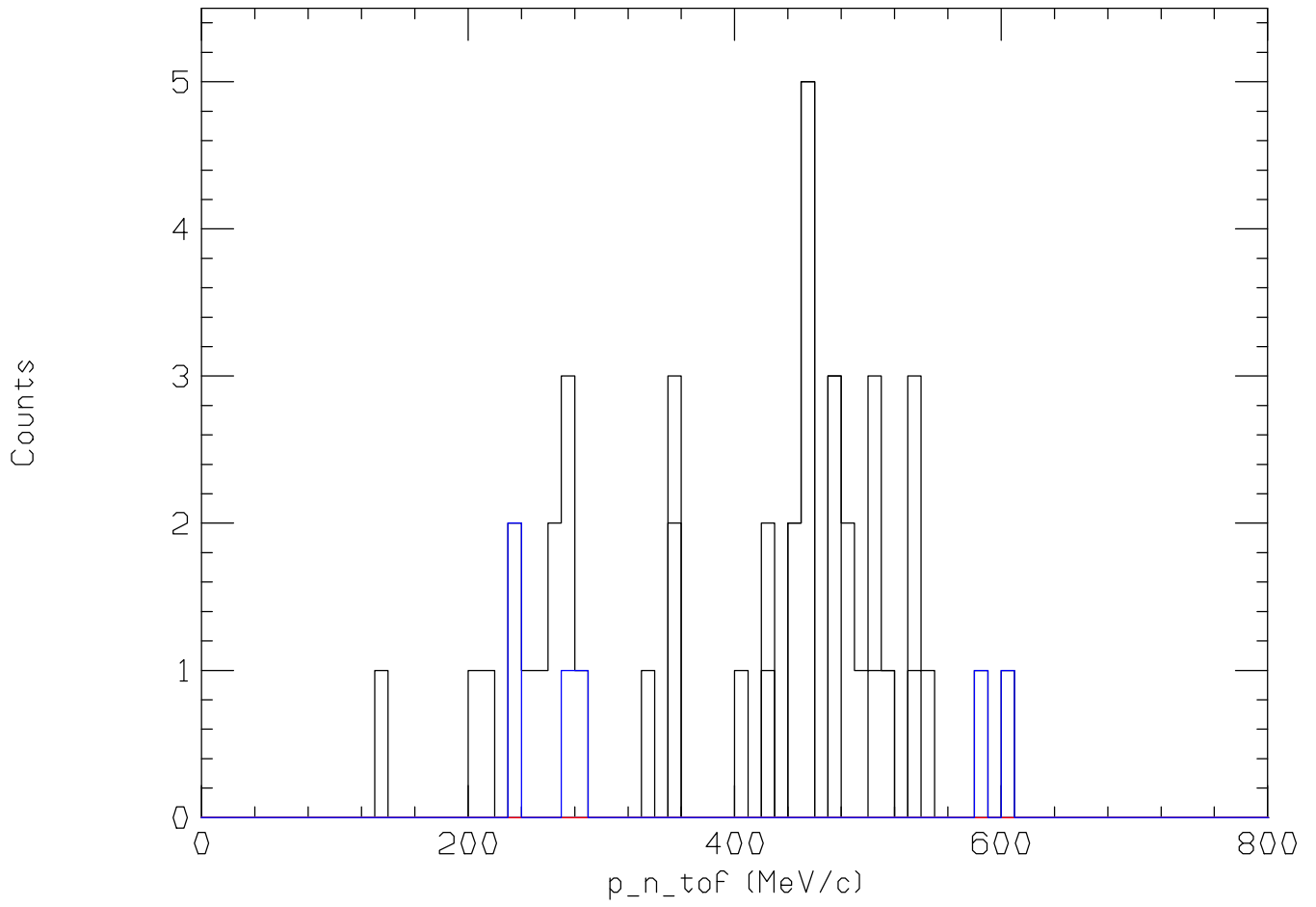


6010: p2: n eff & TRG=MS\_vfast\_p1 & -60<v\_CA\*v\_n<-5

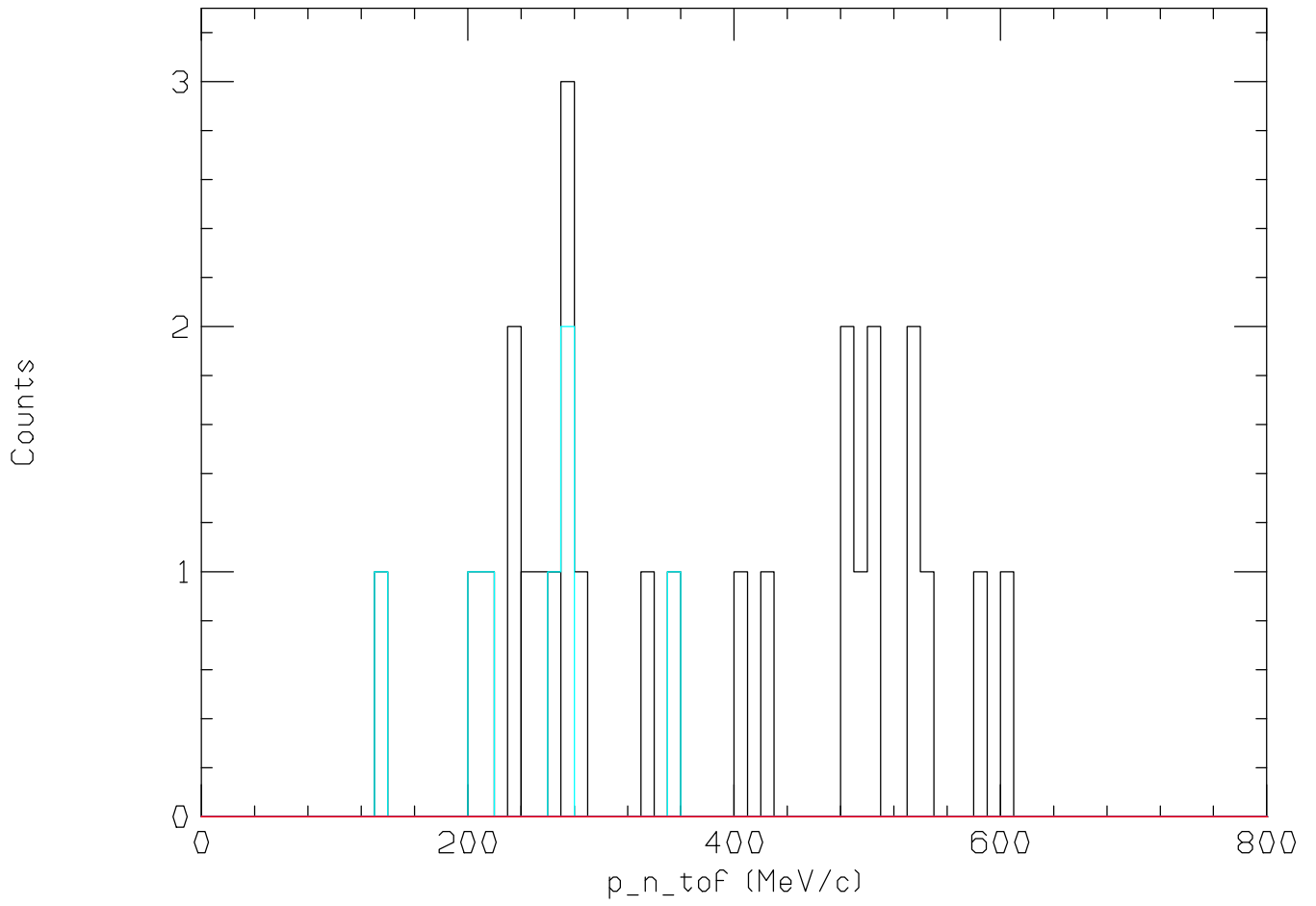




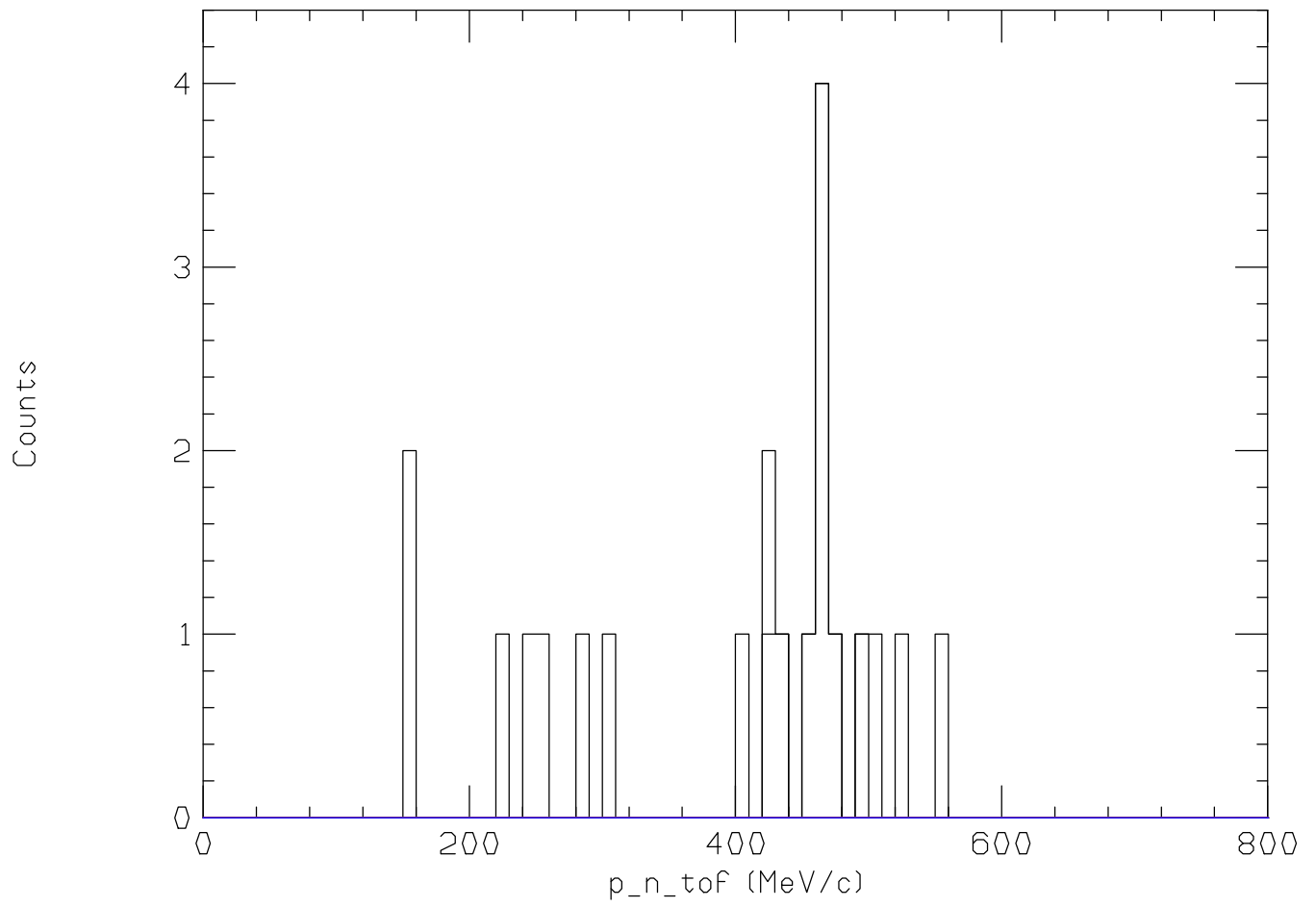
6020: p1: n eff & TRG=MS\_vfast\_p1 &  $-5 < v_{CA} * v_n < 5$



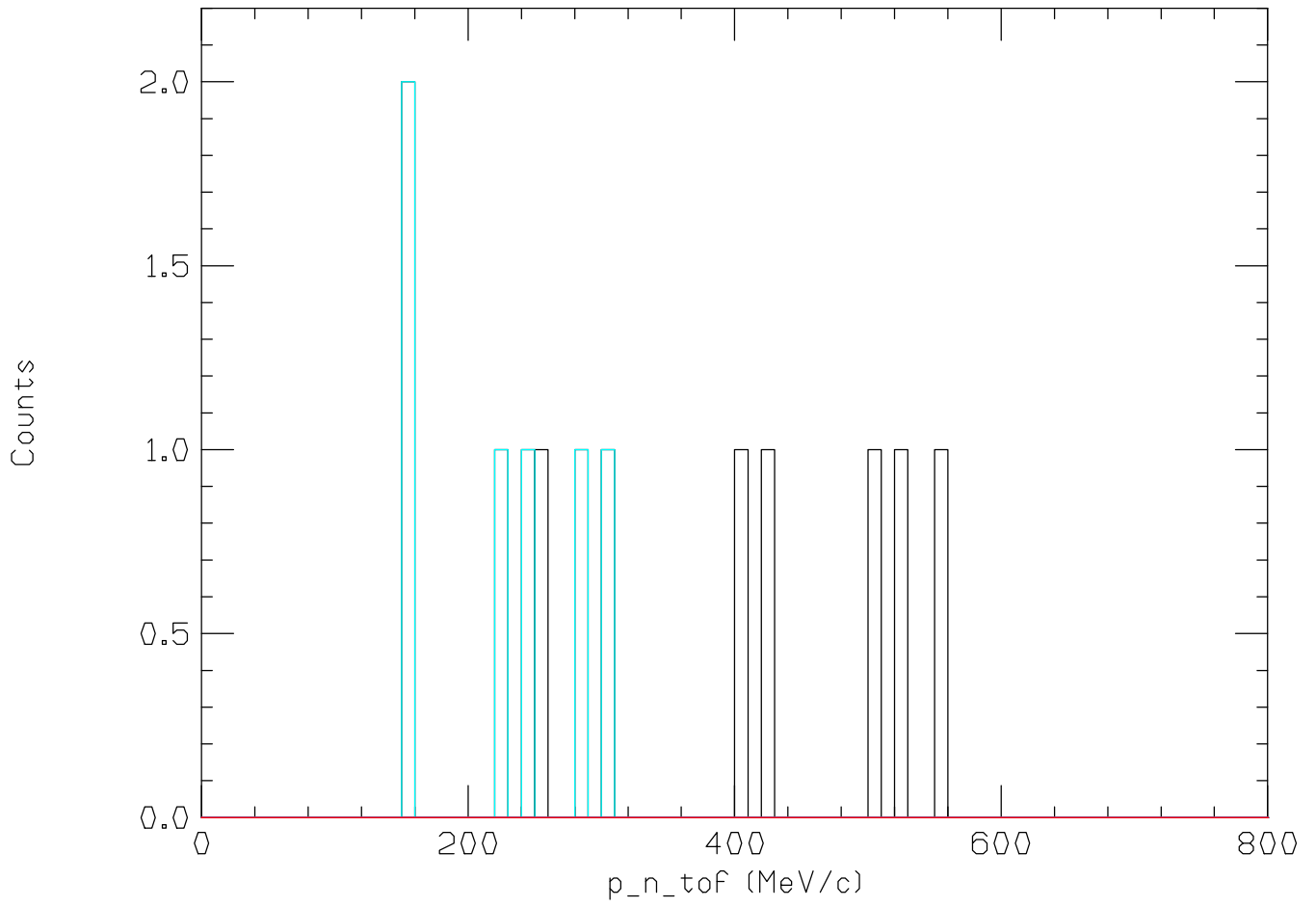
6030: p2: n eff & TRG=MS\_vfast\_p1 &  $-5 < v_{CA} * v_n < 5$



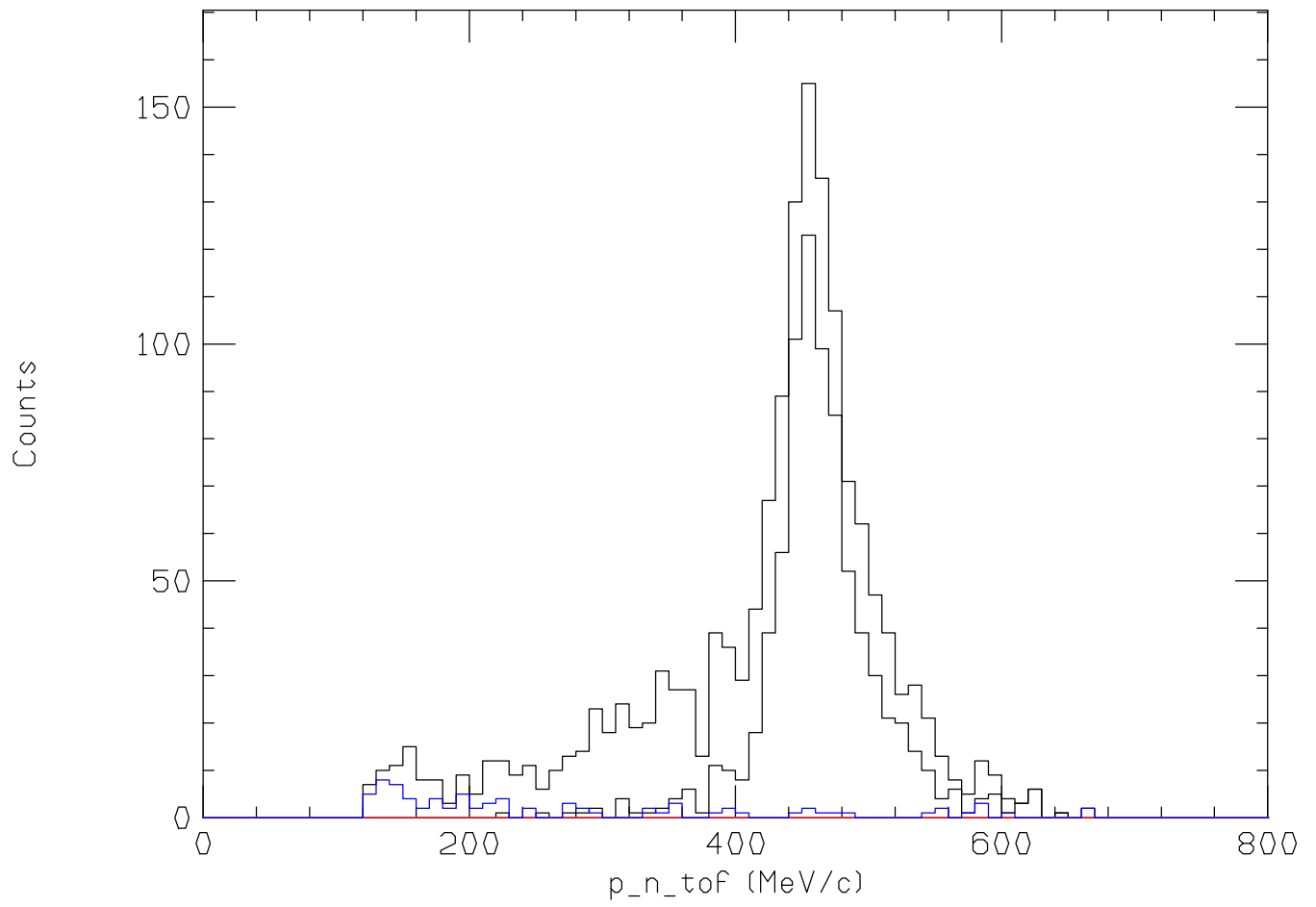
6040: p1: n eff & TRG=MS\_vfast\_p1 & 5<v\_CA\*v\_n<60



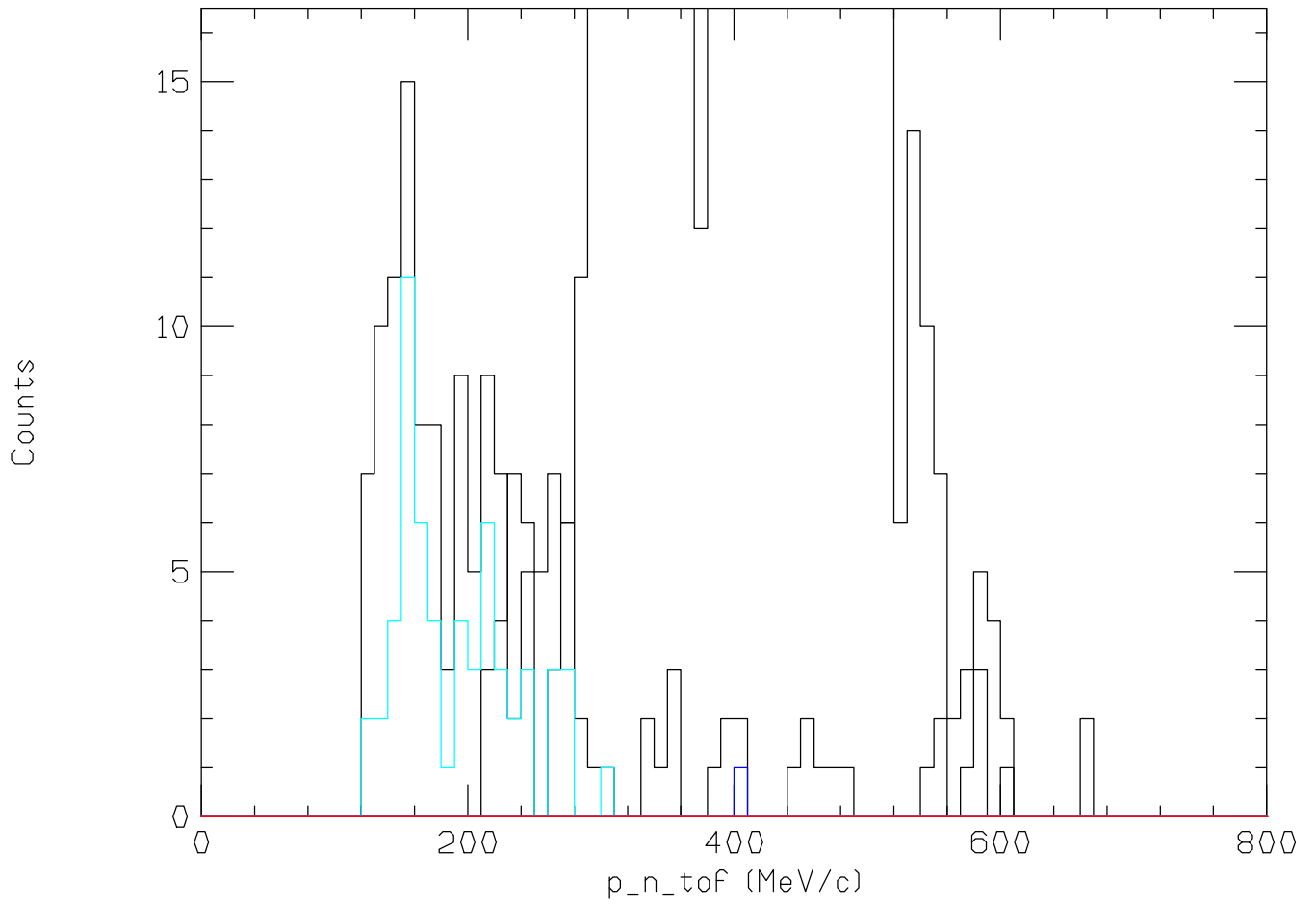
6050: p2: n eff & TRG=MS\_vfast\_p1 & 5<v\_CA\*v\_n<60



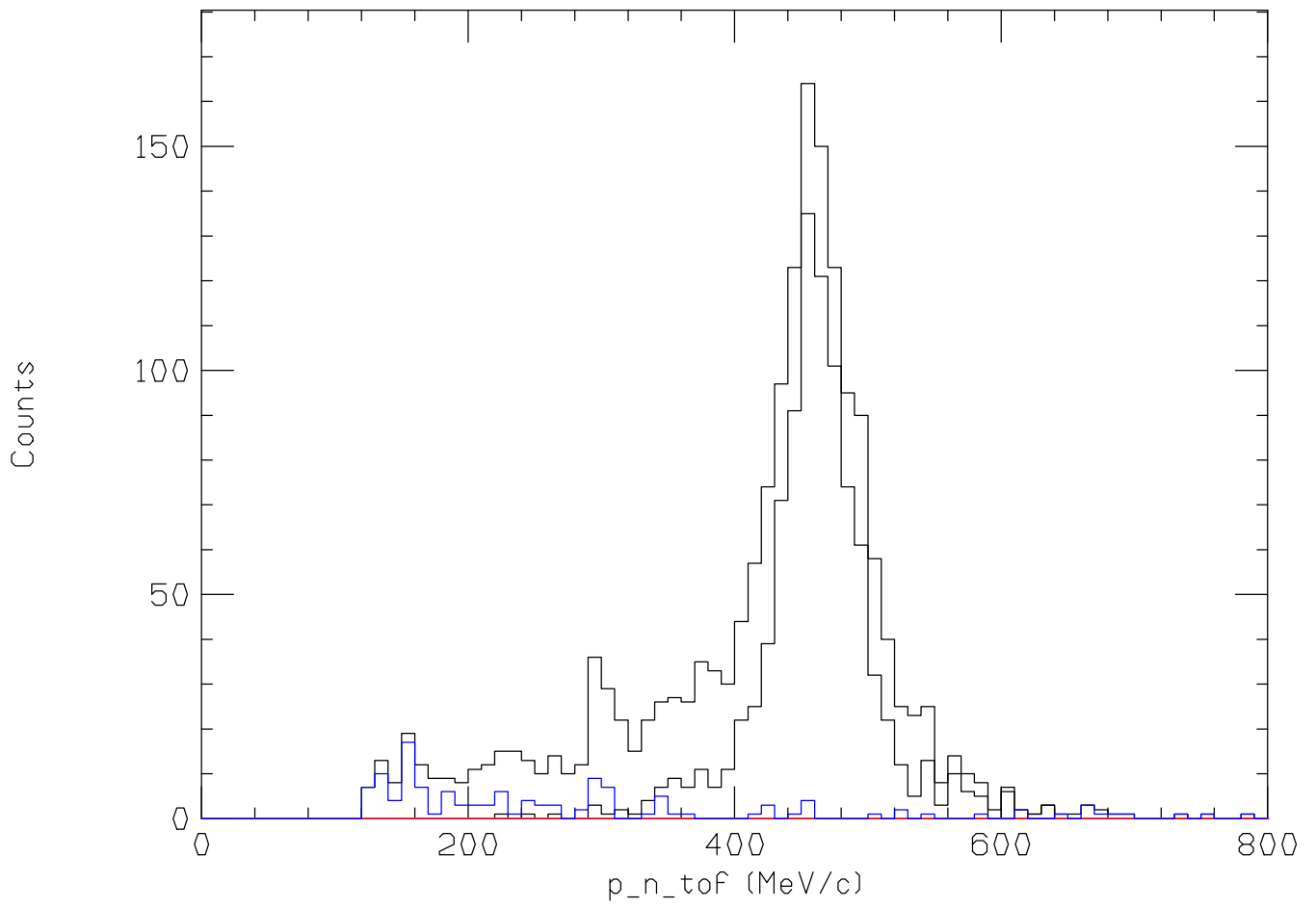
6060: p1: n eff & TRG=MS\_fast\_p1 & -60<v\_CA\*v\_n<-5



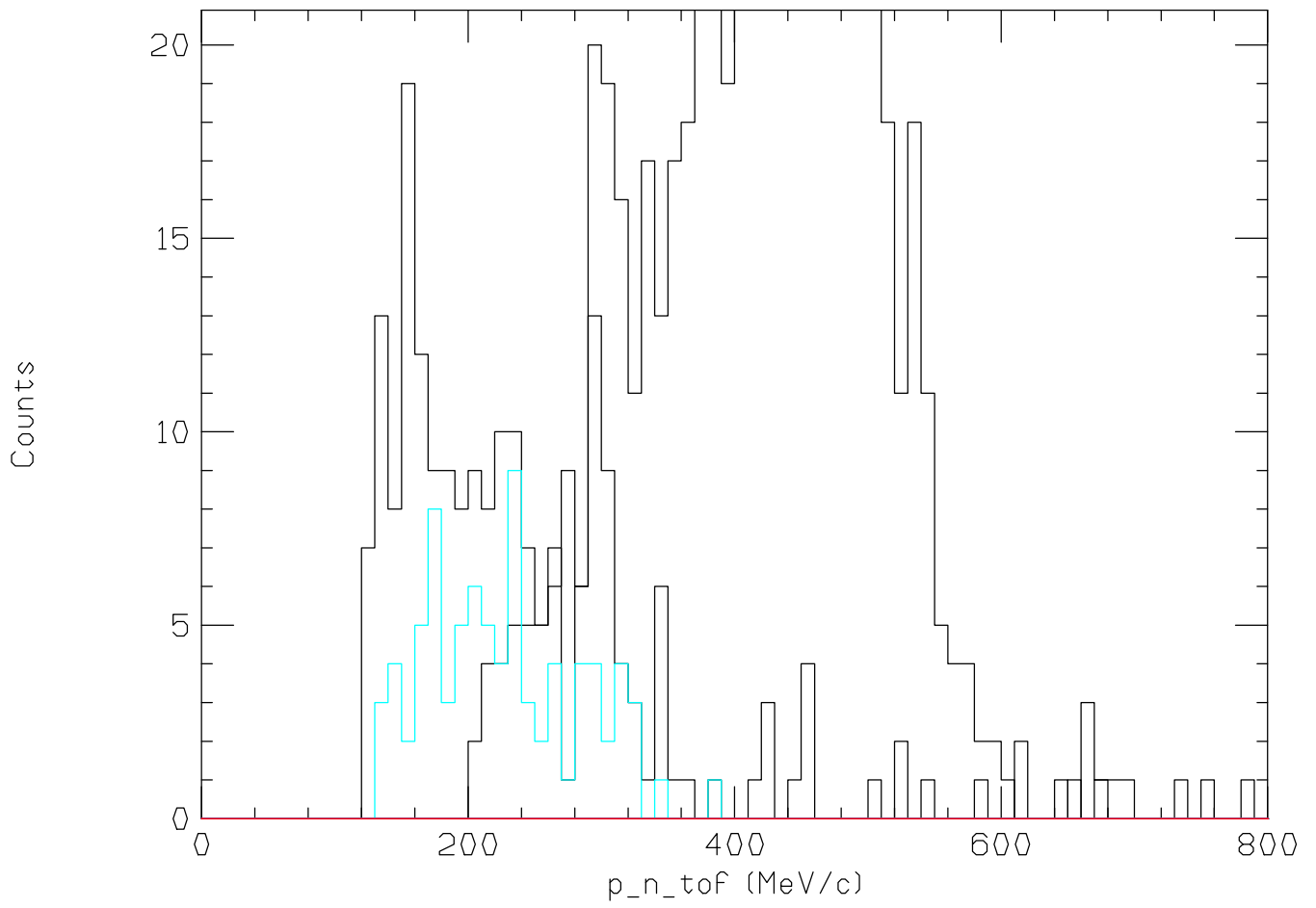
6070: p2: n eff & TRG=MS\_fast\_p1 &  $-60 < v_{CA} * v_n < -5$



6080: p1: n eff & TRG=MS\_fast\_p1 &  $-5 < v_{CA} * v_n < 5$

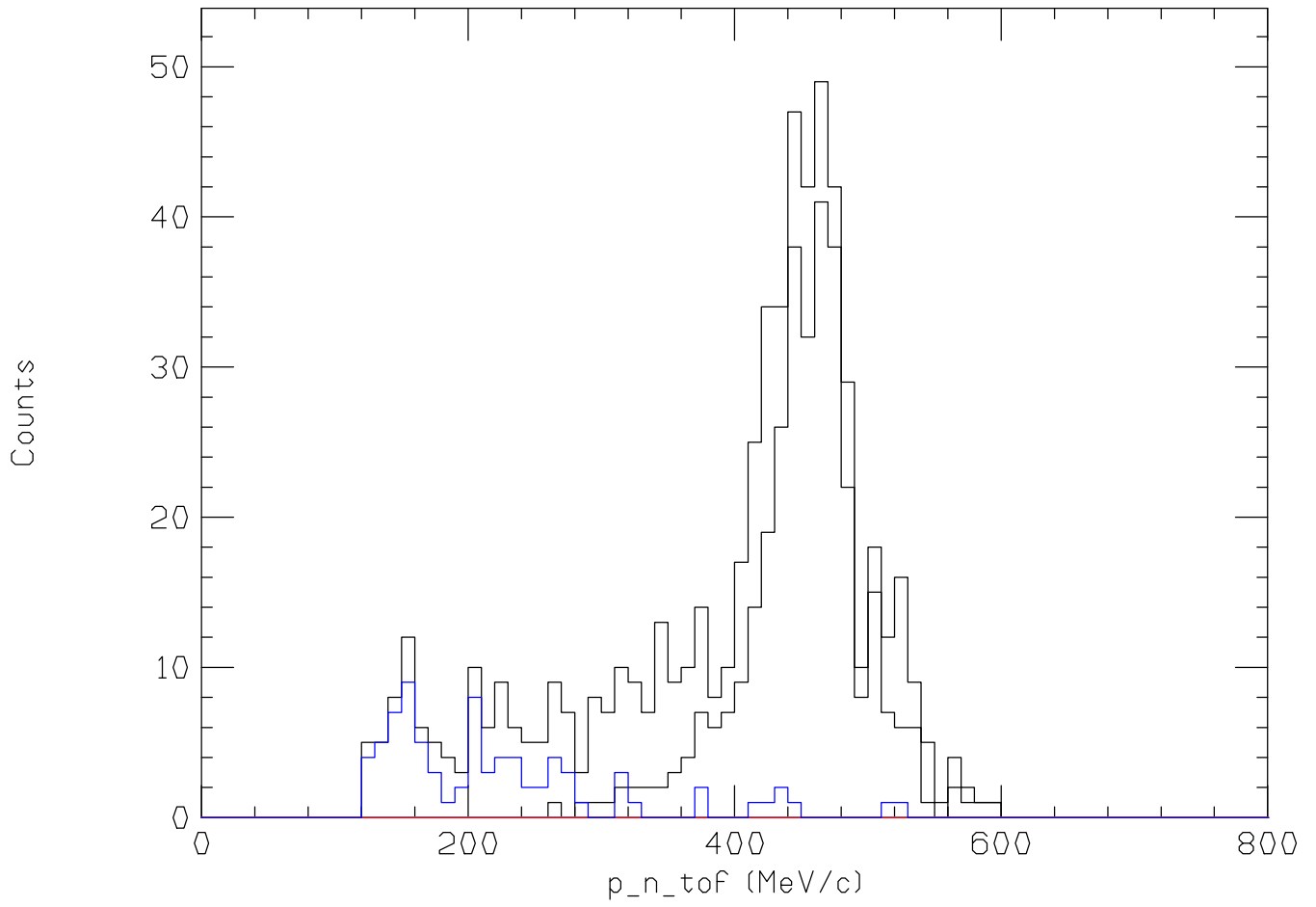


6090: p2: n eff & TRG=MS\_fast\_p1 &  $-5 < v_{CA} * v_n < 5$

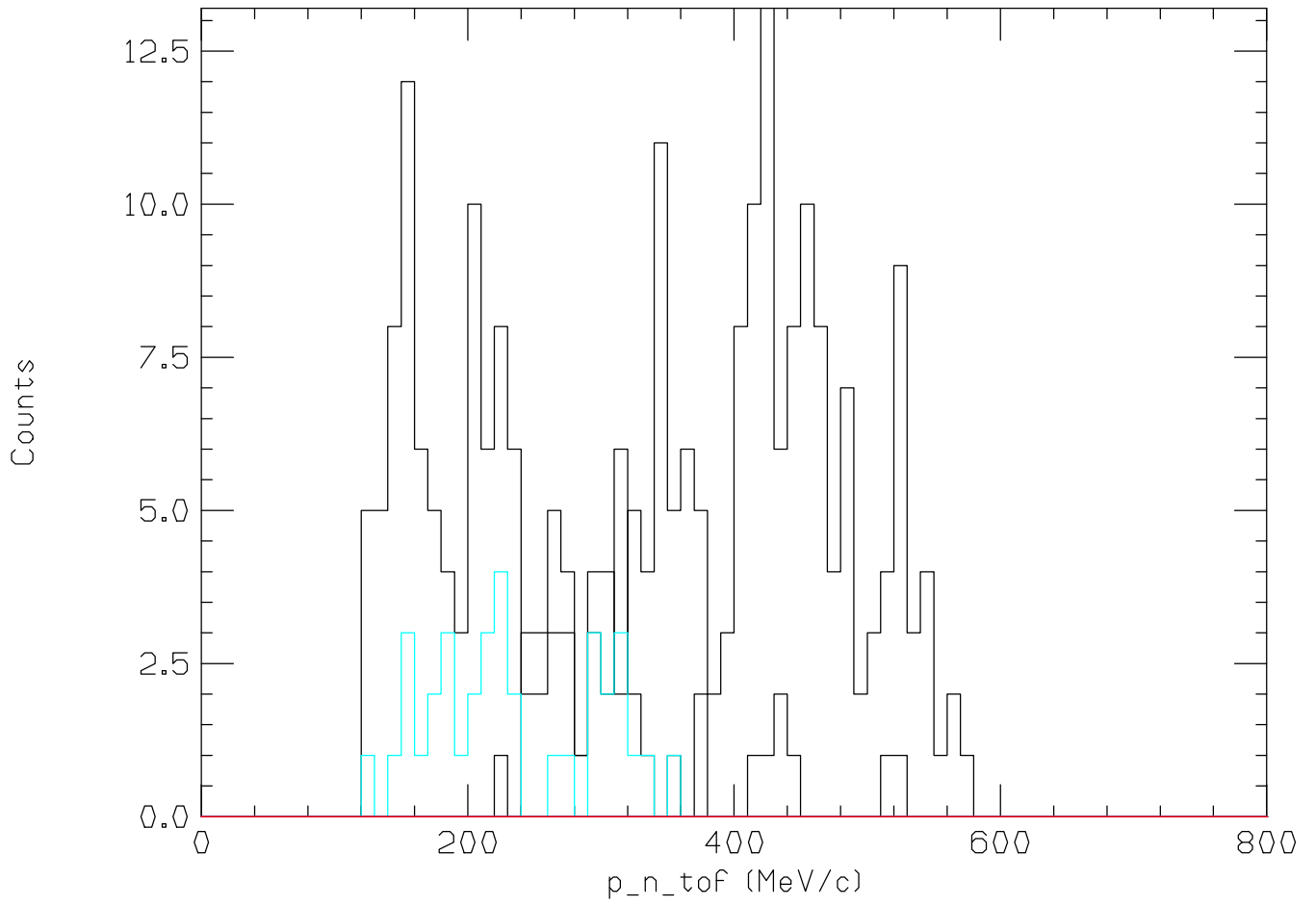




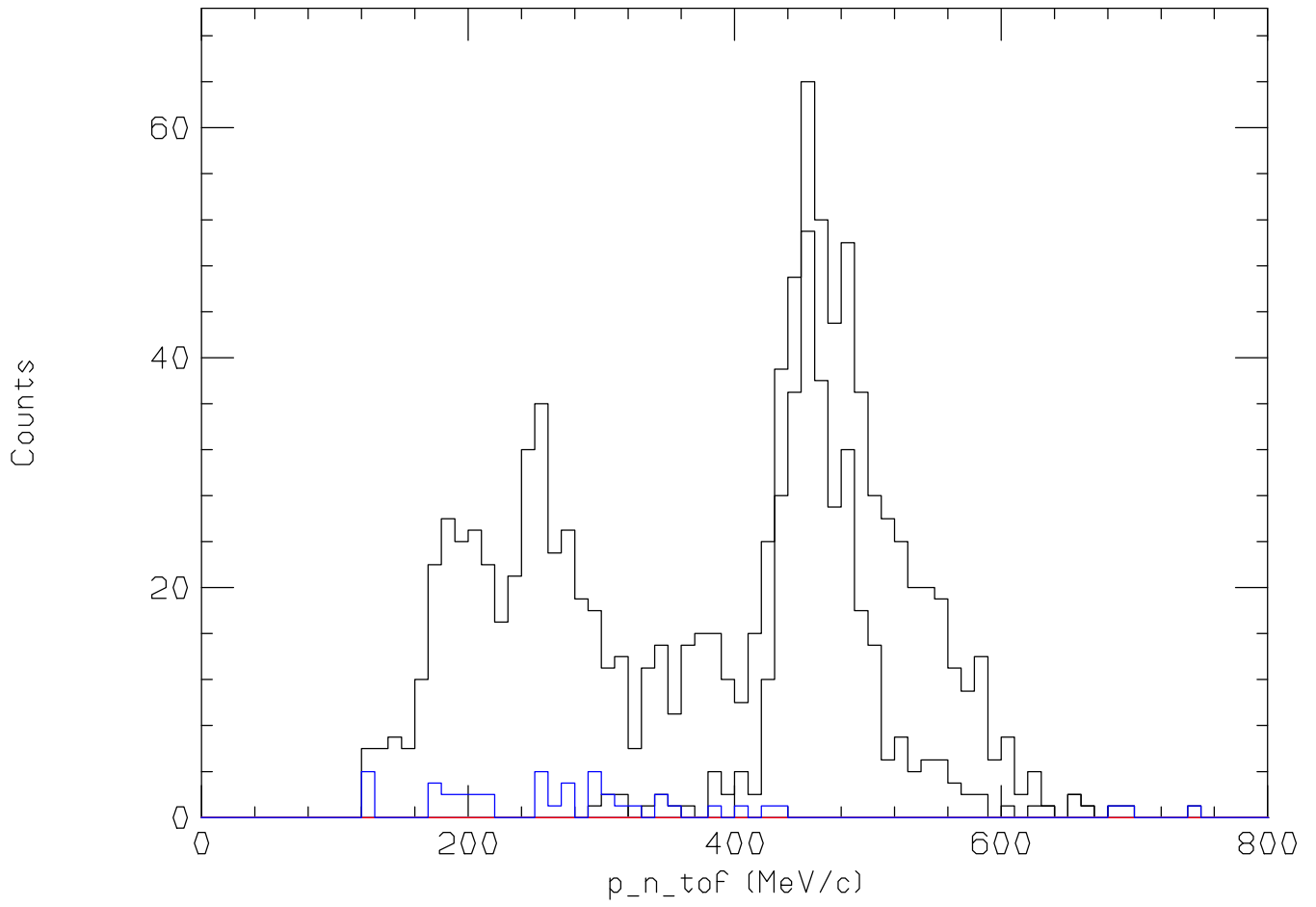
6100: p1: n eff & TRG=MS\_fast\_p1 & 5<v\_CA\*v\_n<60



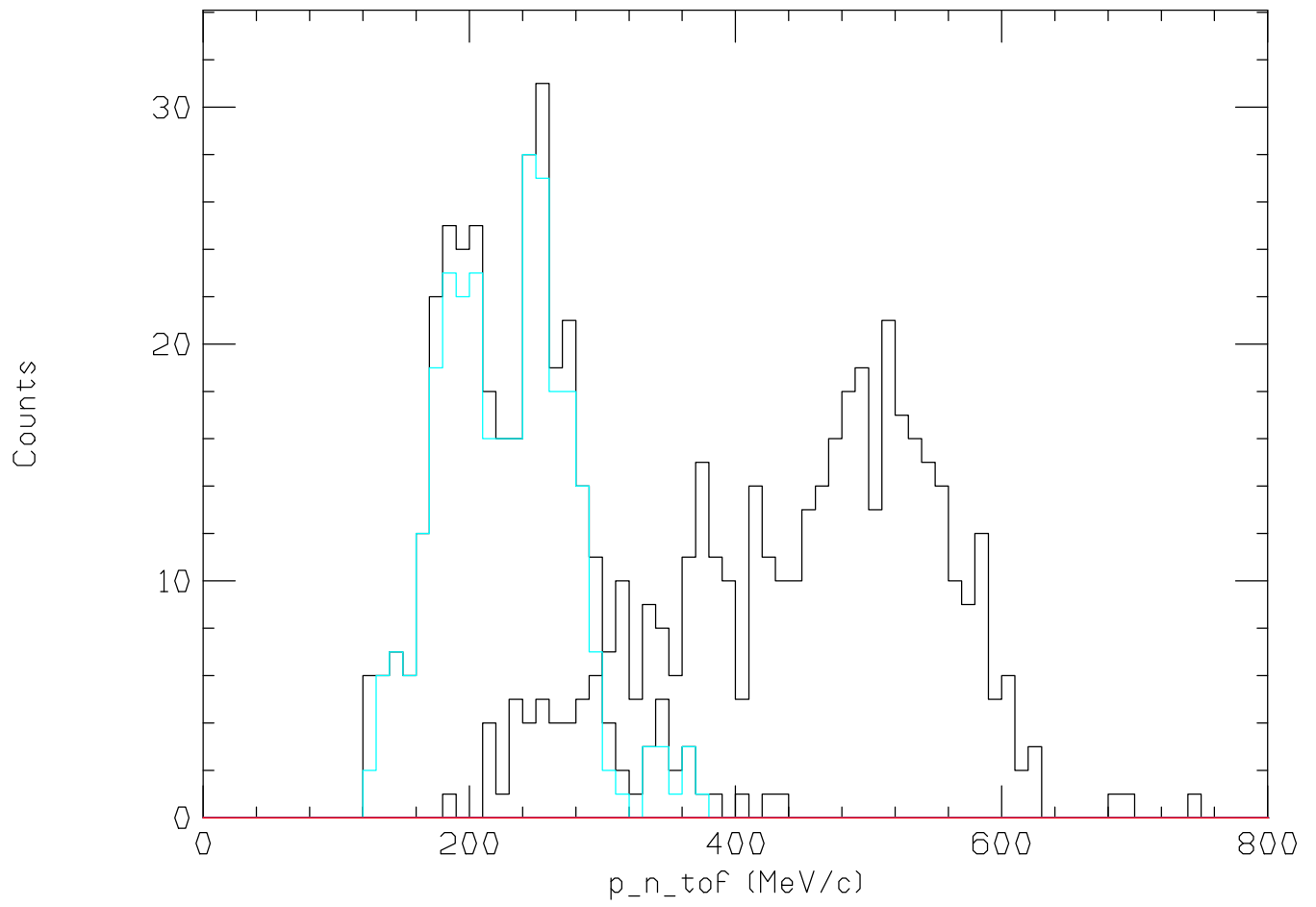
6110: p2: n eff & TRG=MS\_fast\_p1 & 5<v\_CA\*v\_n<60



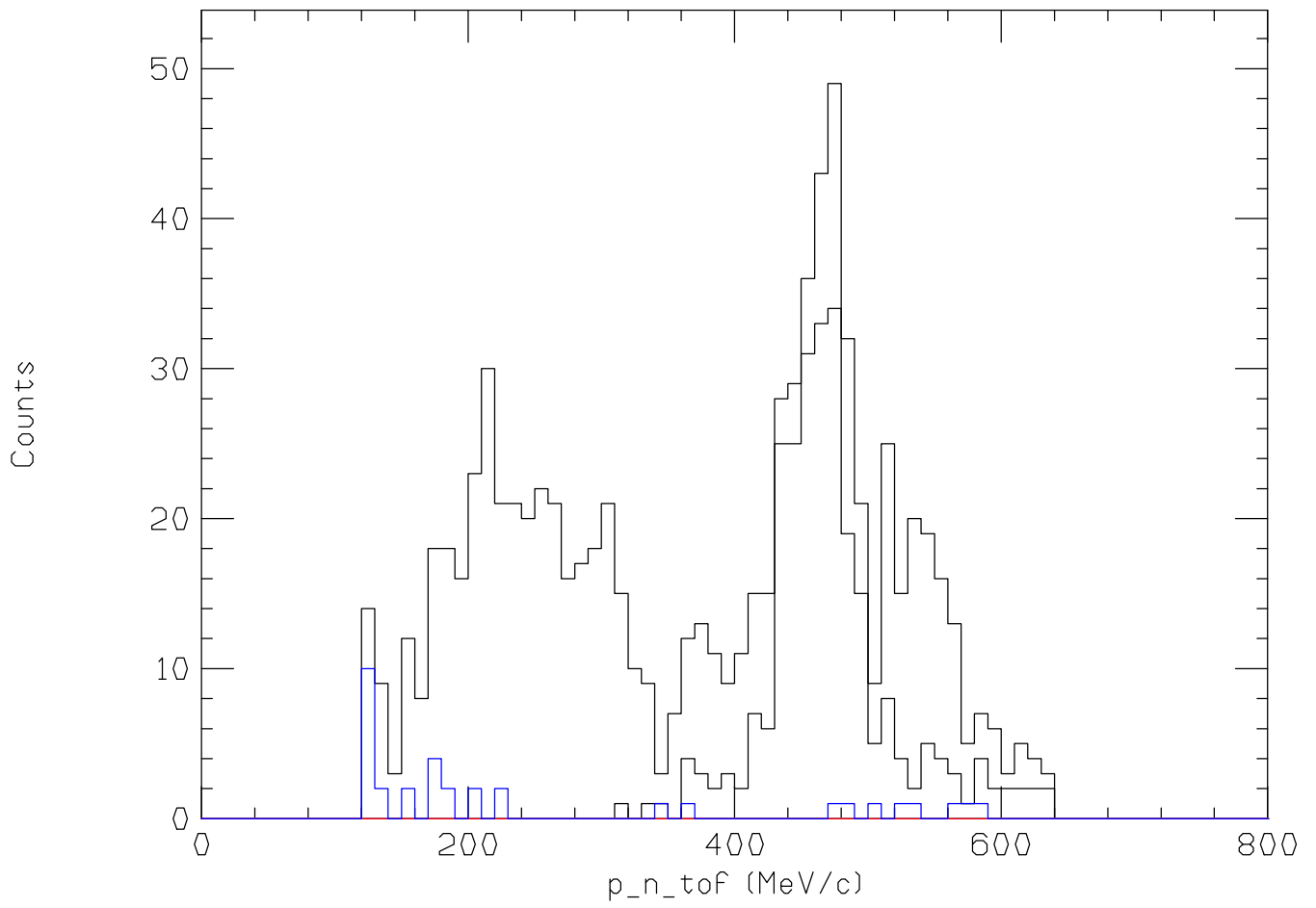
6120: p1: n eff & TRG=MS\_slow\_p1 &  $-60 < v_{CA} * v_n < -5$



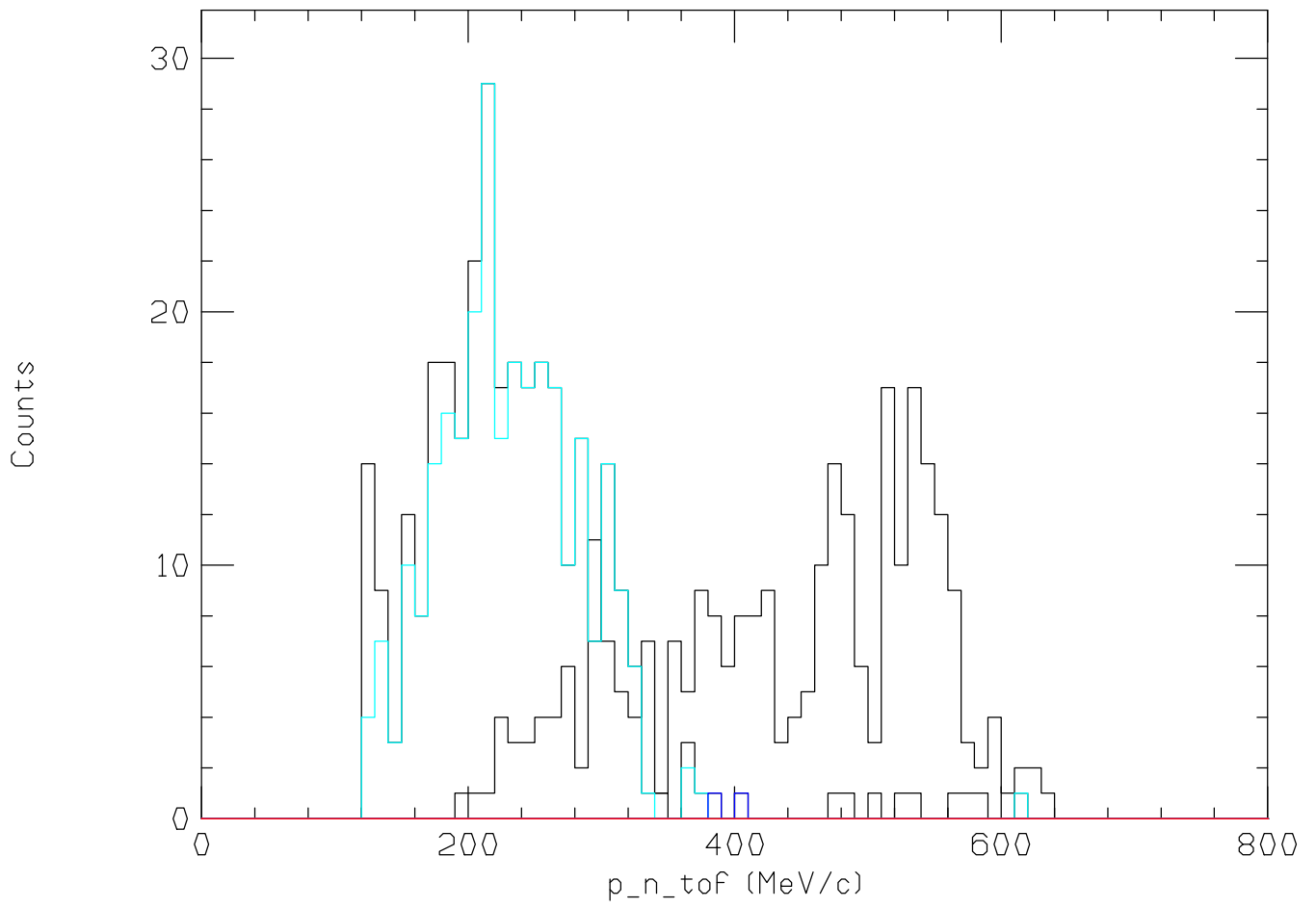
6130: p2: n eff & TRG=MS\_slow\_p1 &  $-60 < v_{CA} * v_n < -5$



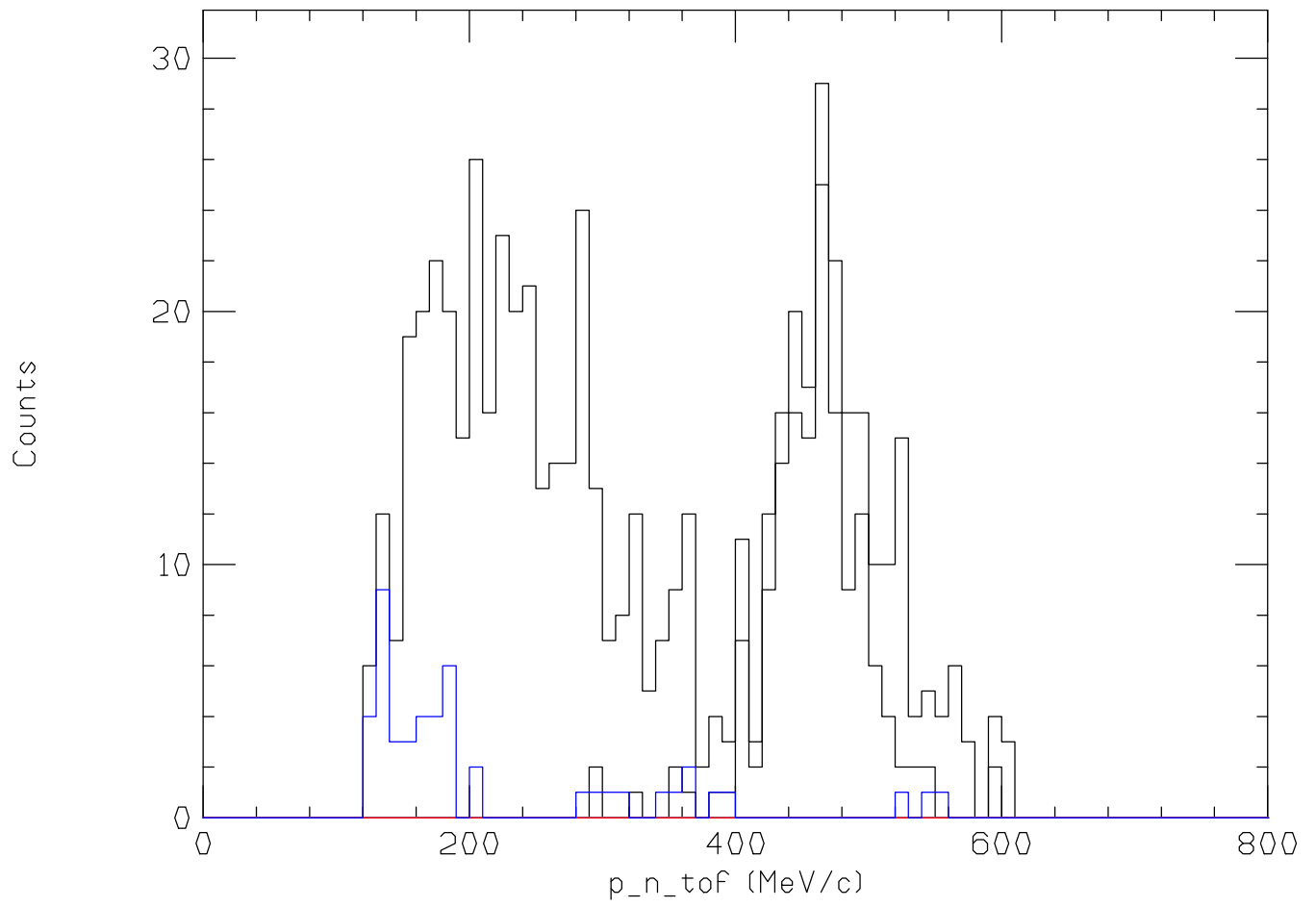
6140: p1: n eff & TRG=MS\_slow\_p1 &  $-5 < v_{CA} * v_n < 5$



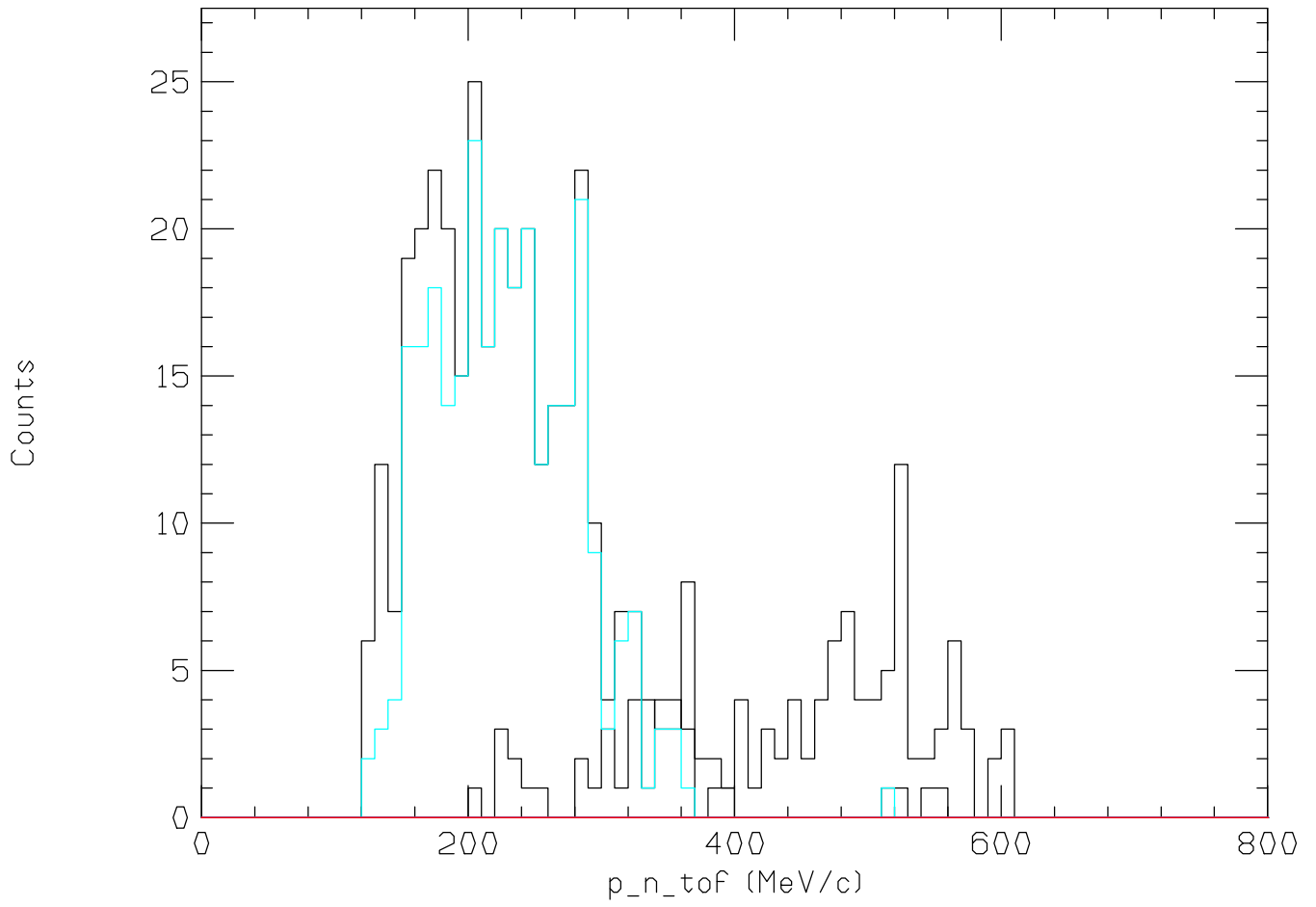
6150: p2: n eff & TRG=MS\_slow\_p1 &  $-5 < v_{CA} * v_n < 5$



6160: p1: n eff & TRG=MS\_slow\_p1 & 5<v\_CA\*v\_n<60

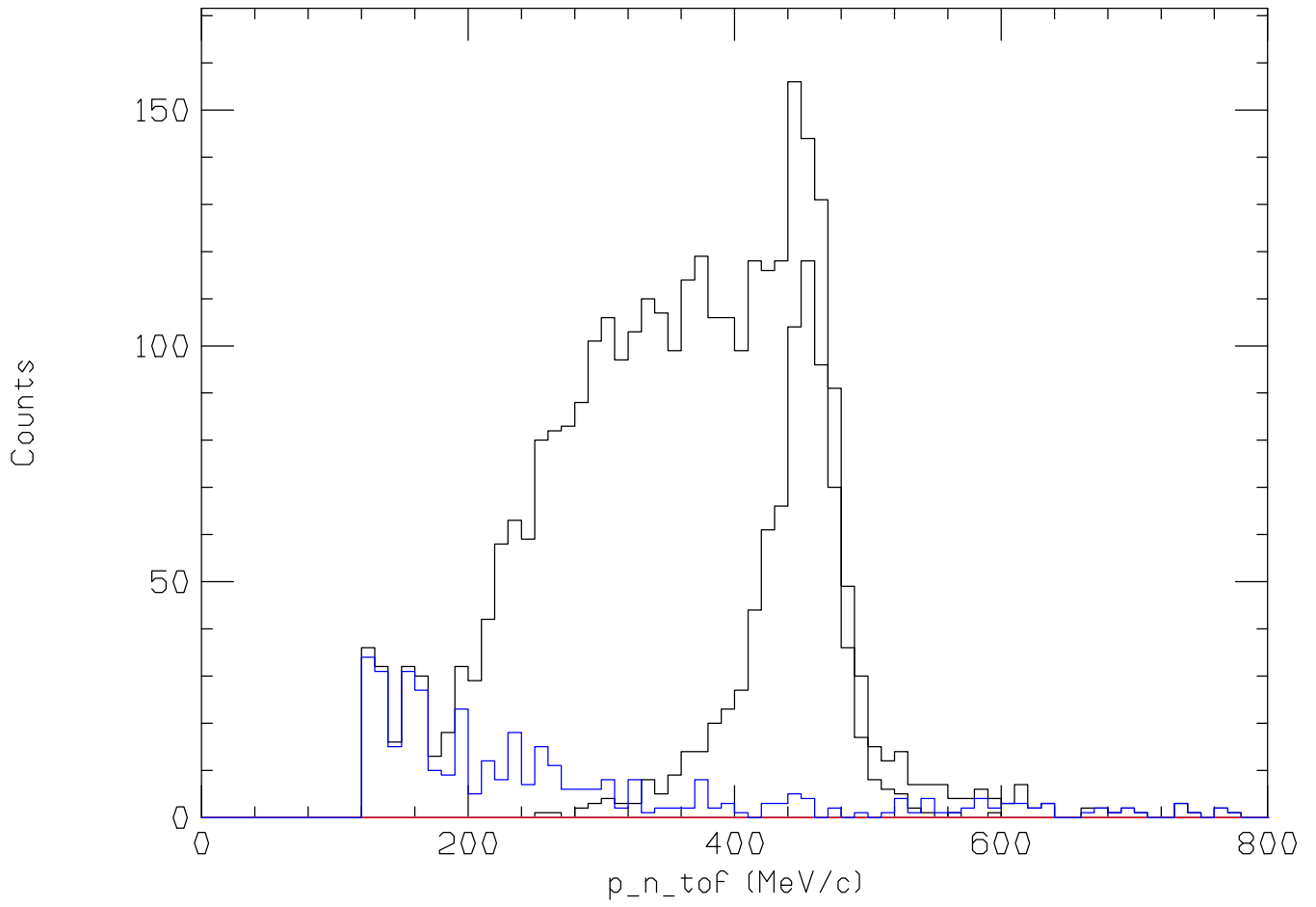


6170: p2: n eff & TRG=MS\_slow\_p1 & 5<v\_CA\*v\_n<60

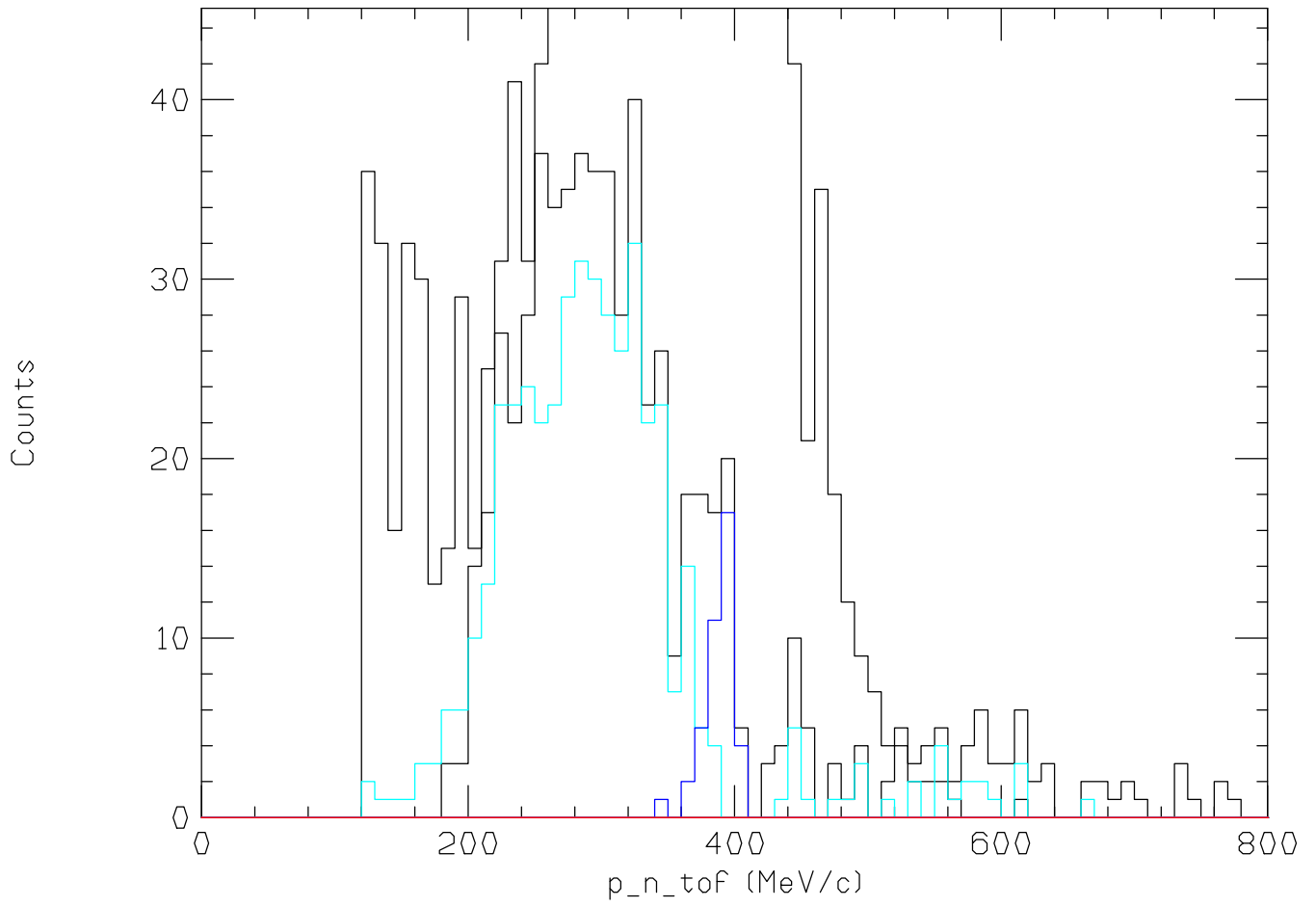




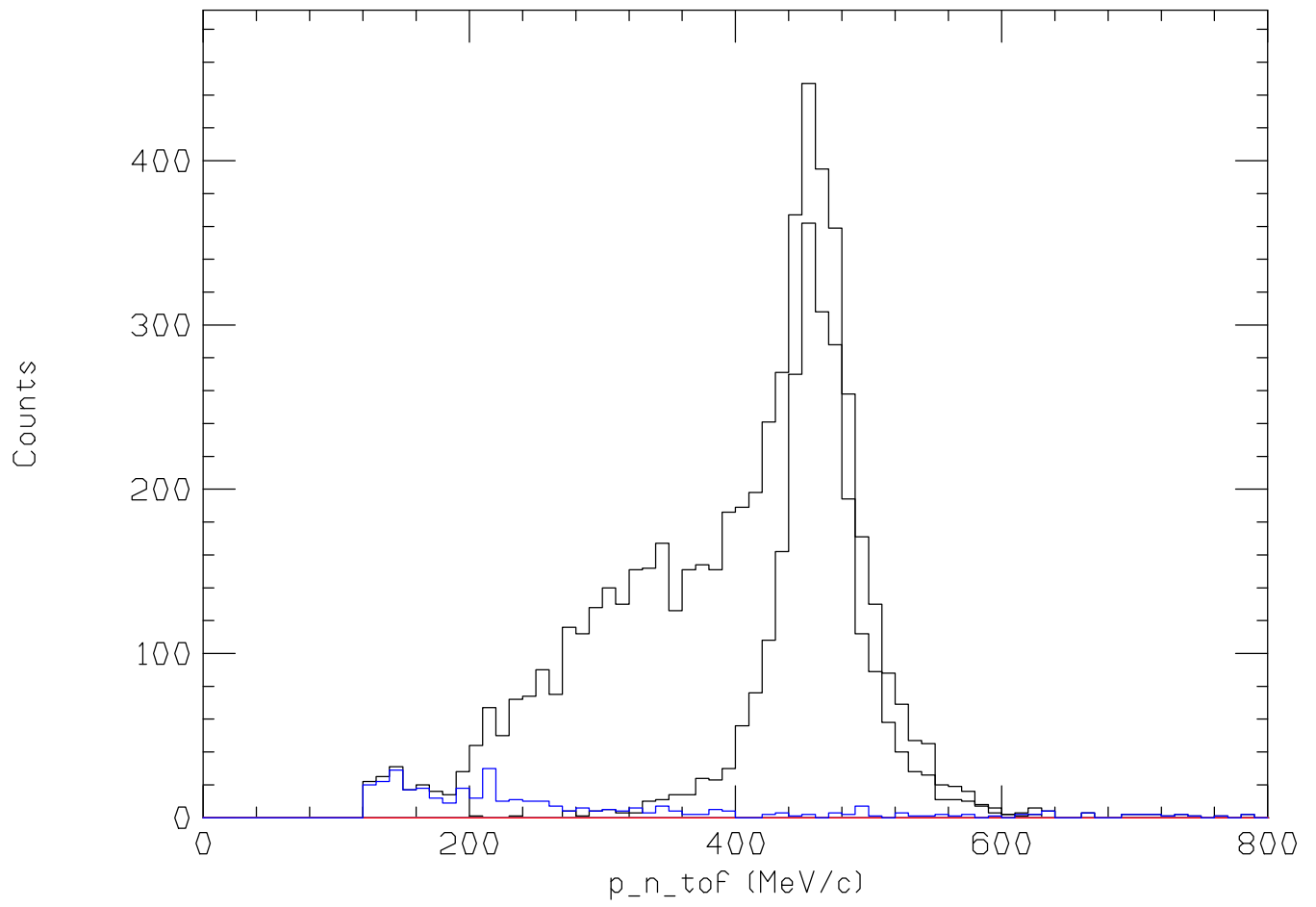
6180: p1: n eff & TRG=MS\_proton & forward



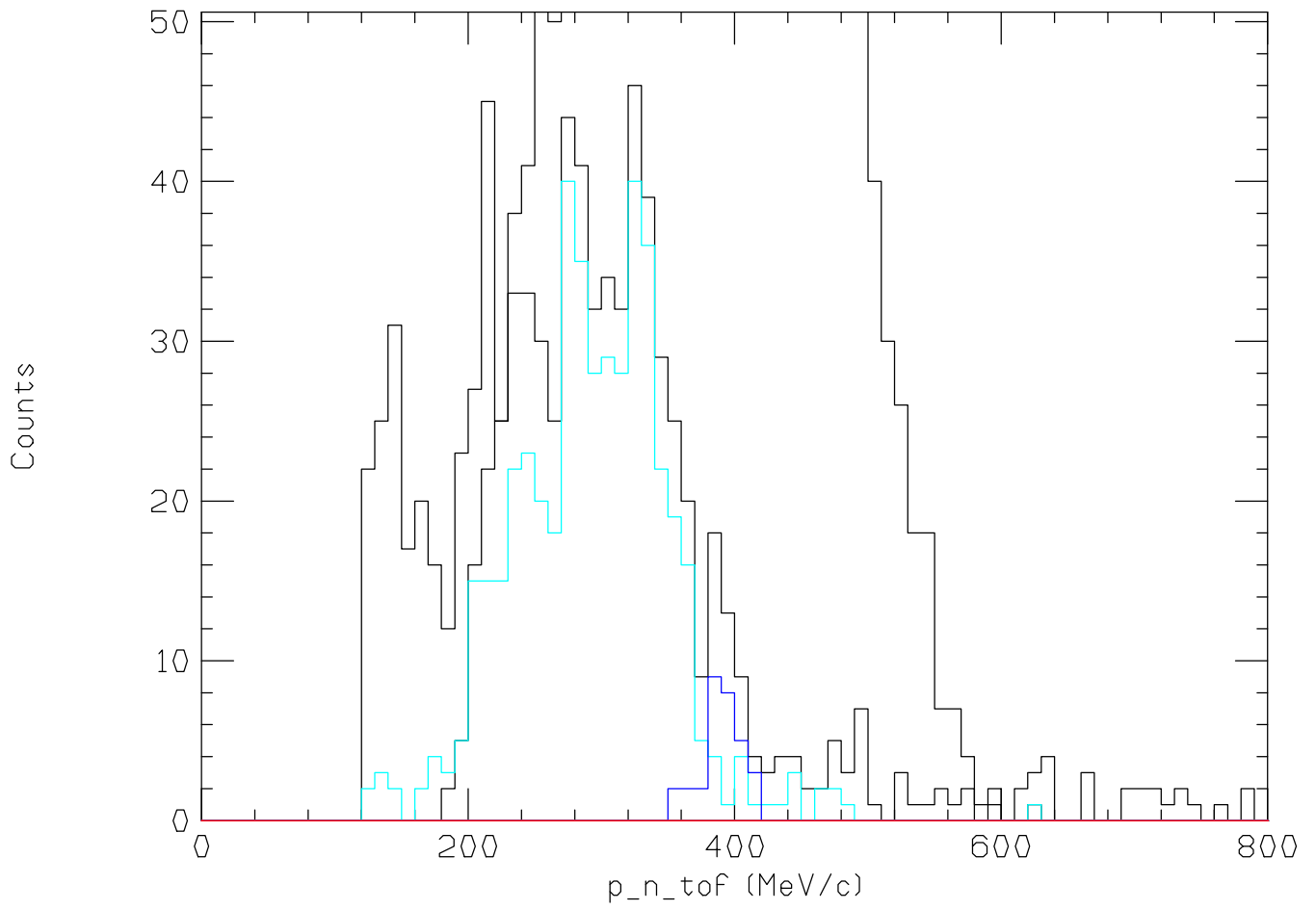
6190: p2: n eff & TRG=MS\_proton & forward



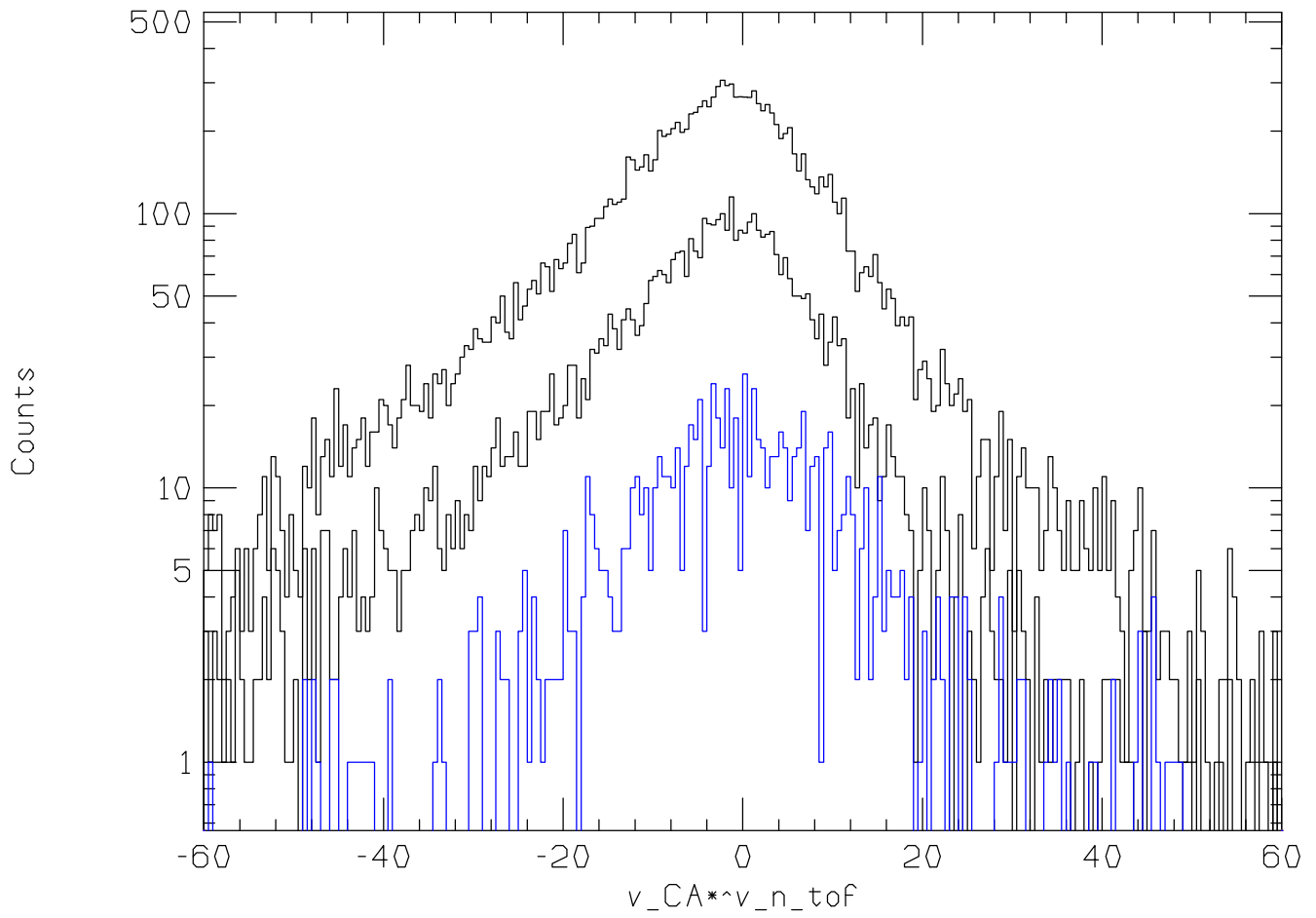
6200: p1: n eff & TRG=MS\_proton & backward



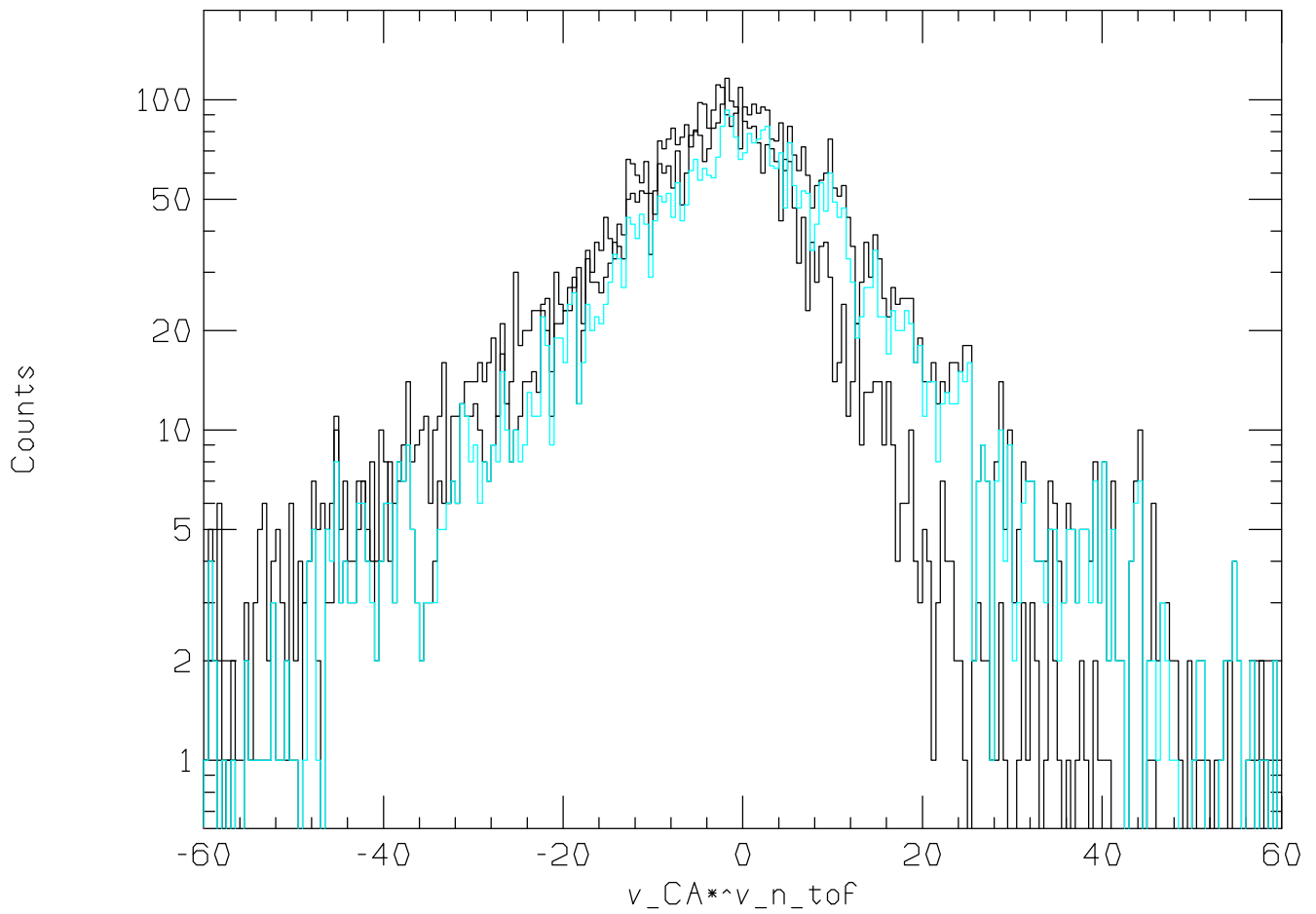
6210: p2: n eff & TRG=MS\_proton & backward



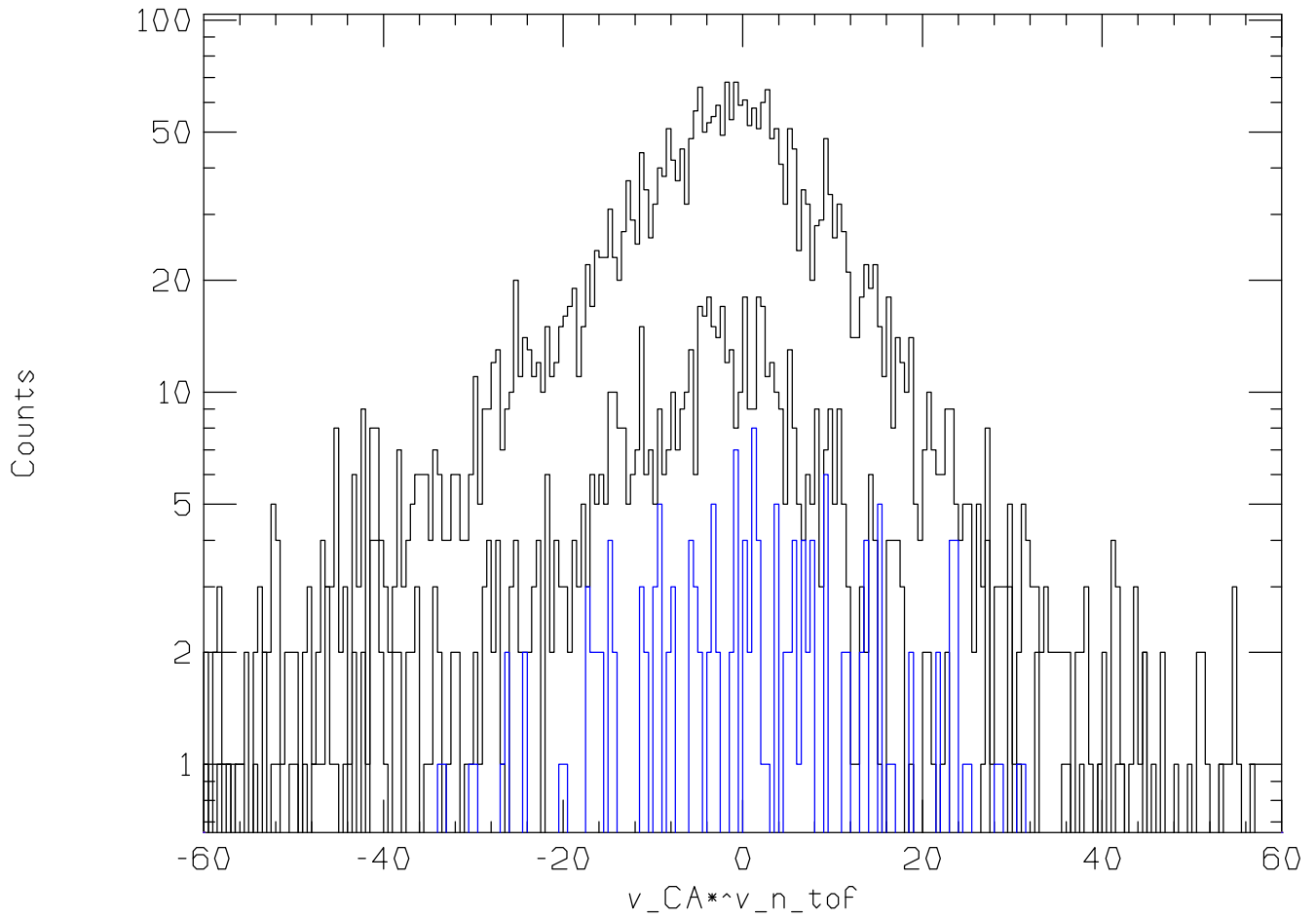
2020: p1:  $v_{CA} \wedge v_{n\_tof}$  : TRG=p1: LOG plot



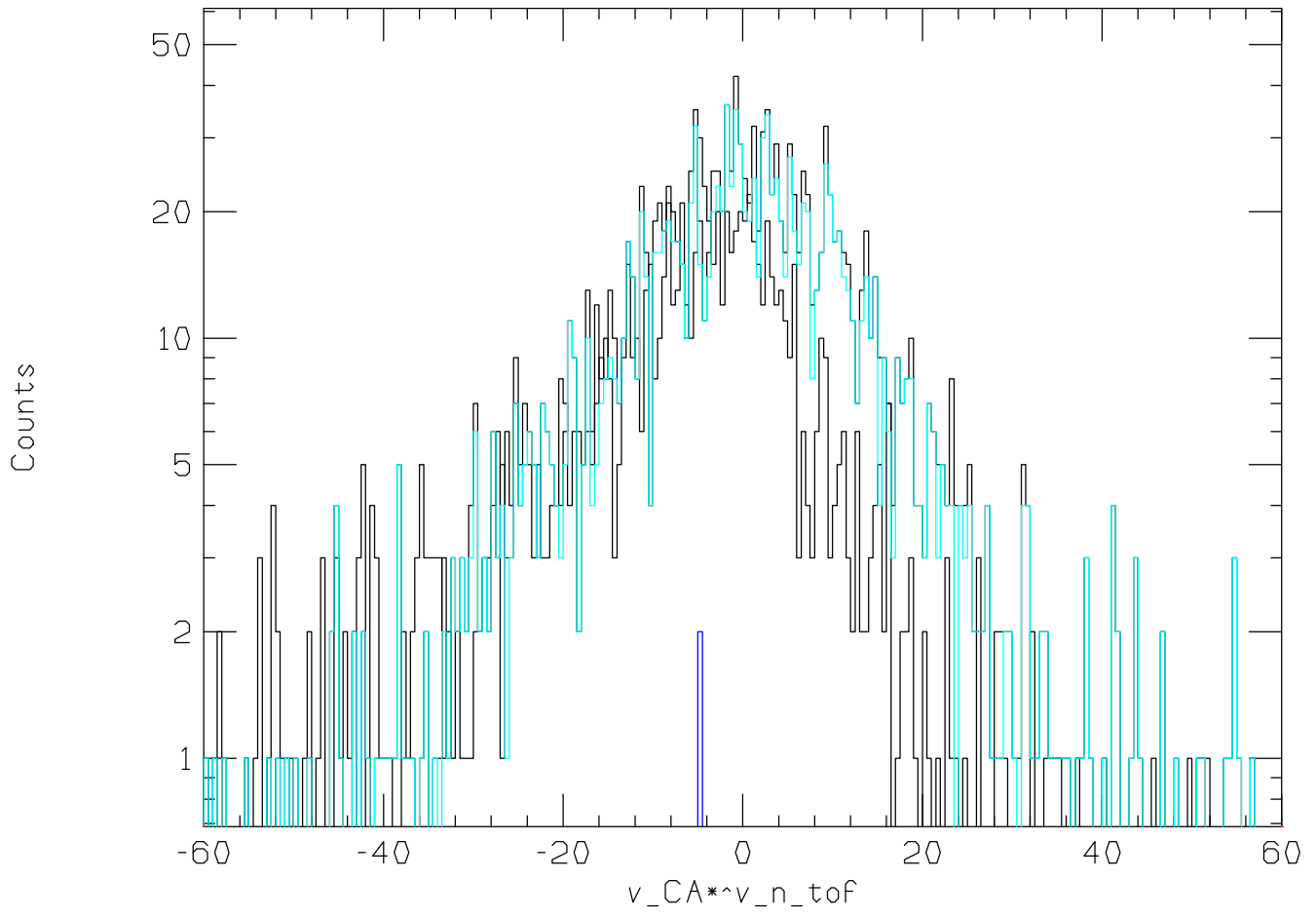
2030: p2:  $v_{CA} \cdot v_{n\_tof}$  : TRG=p1: LOG plot



2120: p1:  $v_{CA} \wedge v_{n\_tof}$  : TRG=MS\_slow\_p1 : LOG plot

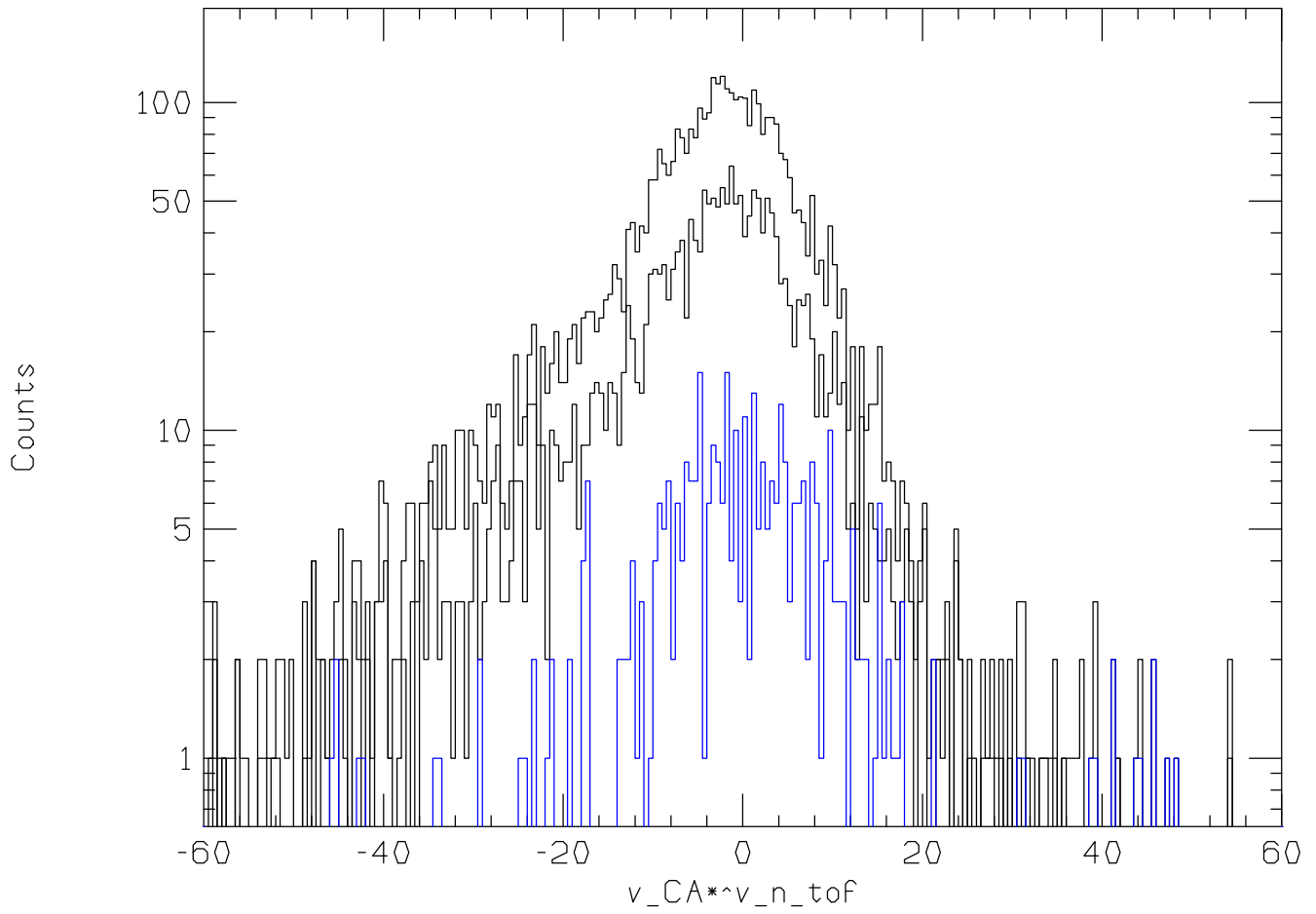


2130: p2:  $v_{CA} \wedge v_{n\_tof}$  : TRG=MS\_slow\_p1 : LOG plot

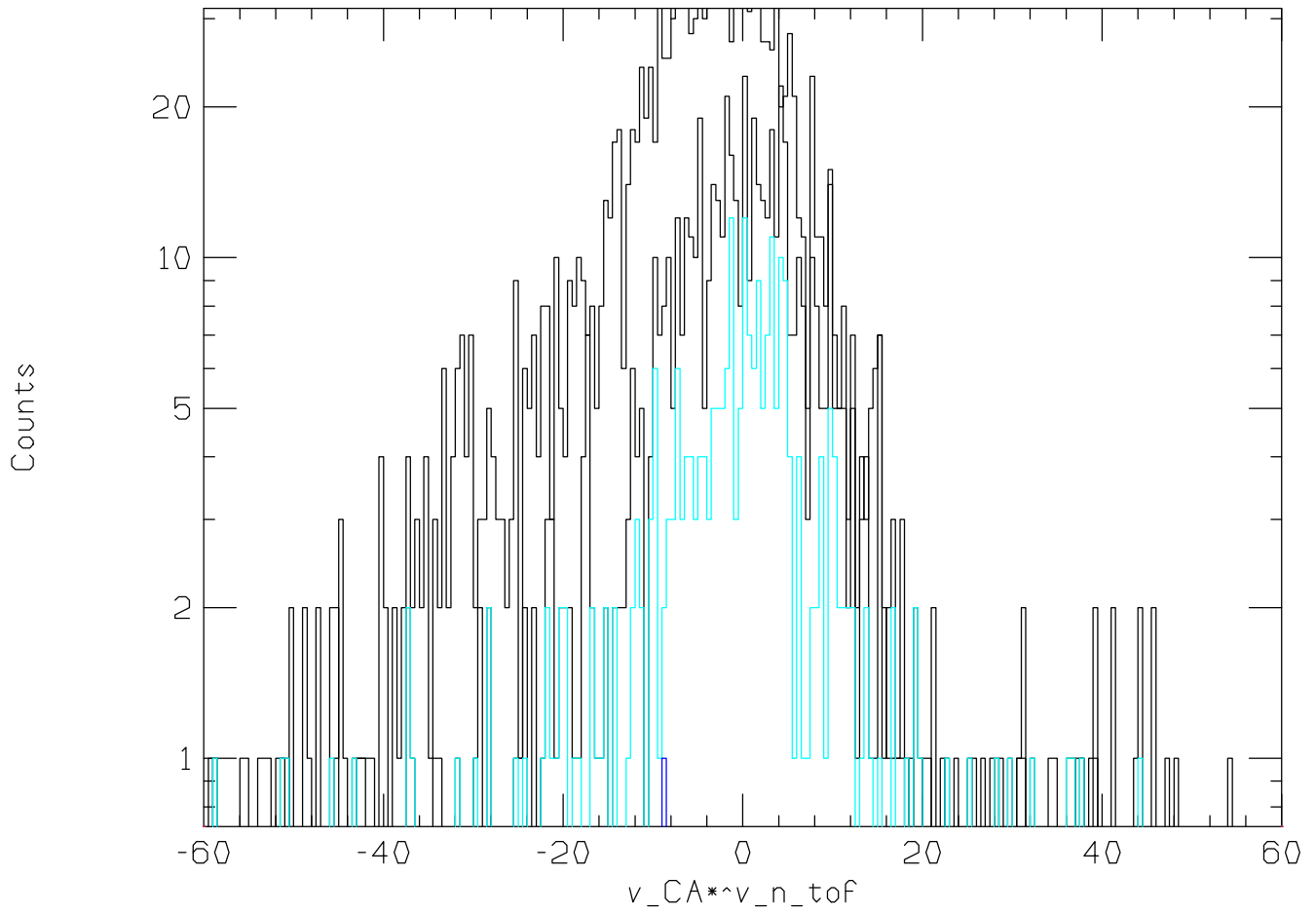




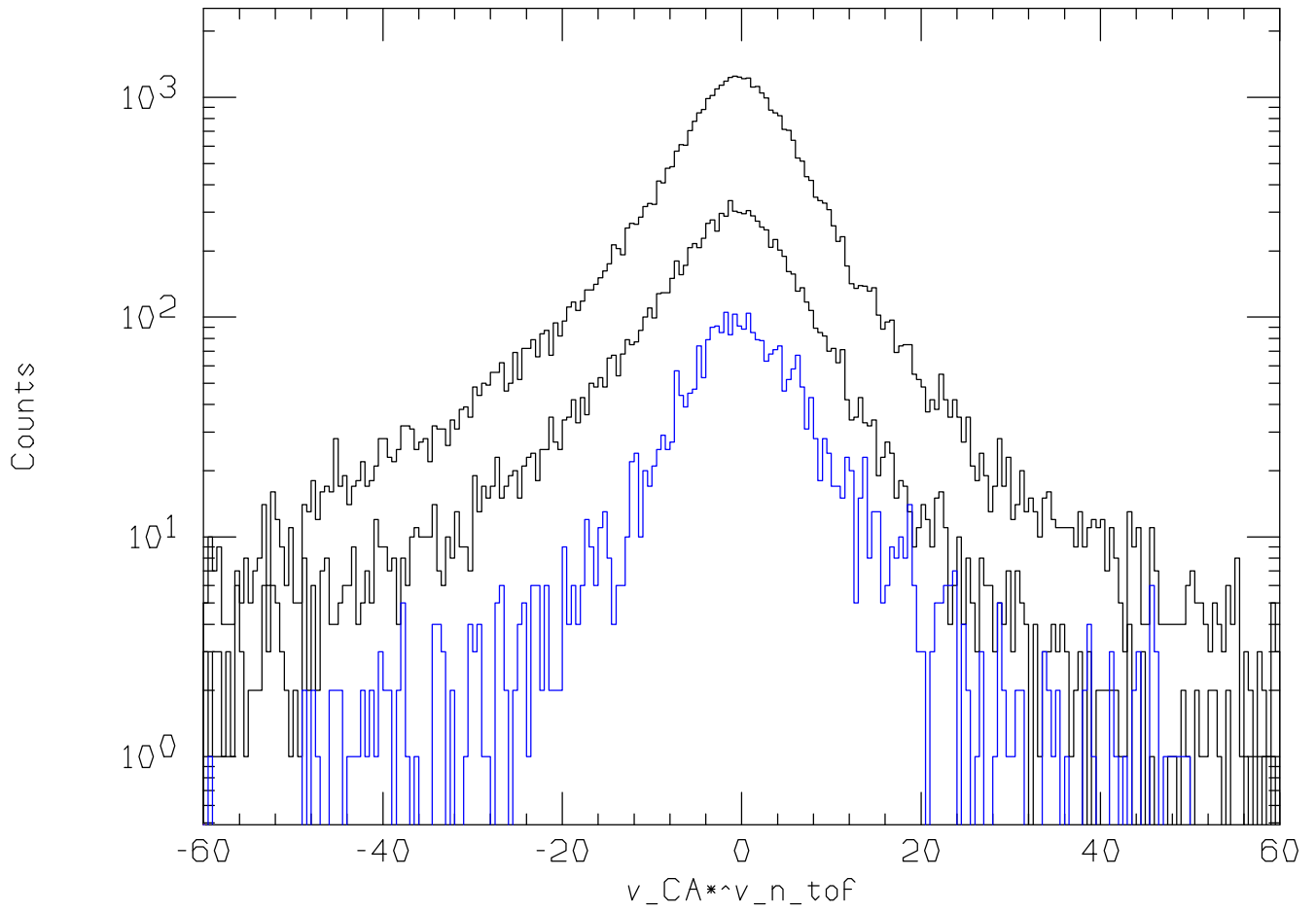
2040: p1:  $v_{CA} \sim v_{n\_tof}$  : TRG=MS\_fast\_p1 : LOG plot



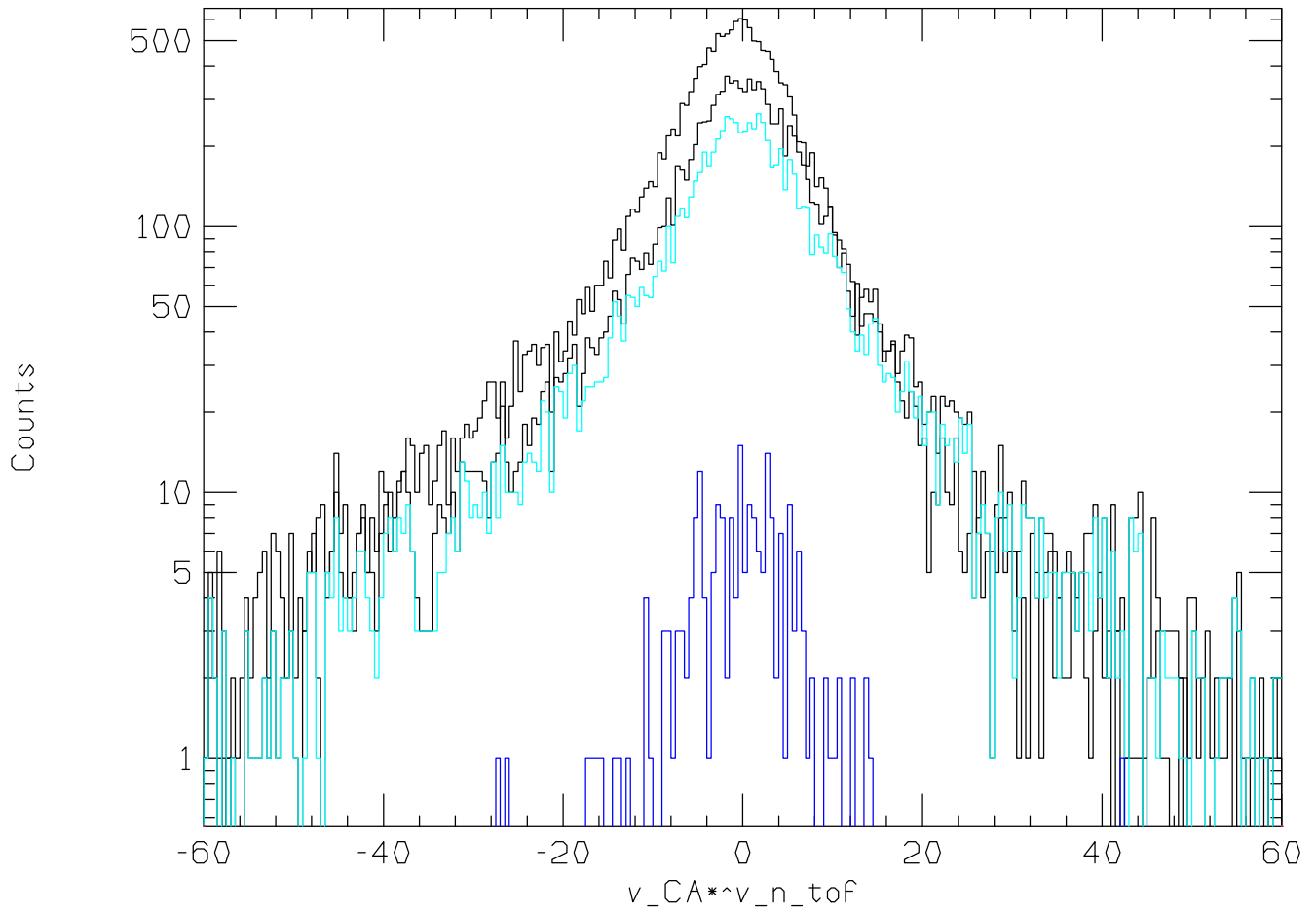
2050: p2: v\_CA\*^v\_n\_tof : TRG=MS\_fast\_p1 : LOG plot



2140: p1: v\_CA\*^v\_n\_tof : TRG=all : LOG plot



2150: p2:  $v_{CA} \wedge v_{n\_tof}$  : TRG=all : LOG plot



```

1      20 % finished
2      Renormalization factor  0.698525
3      H3 pi- S+      :  0.00 +- 0.00   9.3 +- 2.3
4      d n pi- S+    :  0.00 +- 0.00   1.9 +- 0.7
5      p n n pi- S+  :  0.00 +- 0.00   1.6 +- 0.6
6      n n n pi0 S+  :  0.00 +- 0.00   3.2 +- 1.0
7      n n n S+      :  0.00 +- 0.00   1.0 +- 0.4
8      .....
9      total S+      :  0.00 +- 0.00  17.0 +- 2.7
10
11     H3 pi+ S-      :  0.00 +- 0.00   4.2 +- 1.2
12     d n pi+ S-    :  0.00 +- 0.00   1.6 +- 0.6
13     p n n pi+ S-  :  0.00 +- 0.00   1.4 +- 0.5
14     He3 pi0 S-    :  0.00 +- 0.00   1.0 +- 0.5
15     d p pi0 S-    :  0.00 +- 0.00   1.0 +- 0.5
16     p p n pi0 S-  :  0.00 +- 0.00   1.0 +- 0.4
17     d p S-        :  0.00 +- 0.00   1.6 +- 0.6
18     p p n S-      :  0.00 +- 0.00   2.0 +- 0.7
19     .....
20     total S-      :  0.00 +- 0.00  13.8 +- 1.8
21
22     He3 pi- L      :  0.00 +- 0.00  11.2 +- 2.7
23     d p pi- L      :  0.00 +- 0.00  10.9 +- 2.6
24     p p n pi- L    :  0.00 +- 0.00   9.5 +- 2.4
25     He3 pi- S0     :  0.00 +- 0.00   0.9 +- 0.6
26     d p (ppn) pi- S0 :  0.00 +- 0.00   0.3 +- 0.3
27     d n (pnn) pi0 L (S0) :  0.00 +- 0.00  22.5 +- 4.2
28     d n (pnn) L (S0) :  ***** +- 0.08  11.7 +- 2.4
29     n n n pi+ L (S0) :  0.00 +- 0.00   2.1 +- 0.7
30     .....
31     total L (S0)   :  ***** +- 0.08  69.2 +- 6.6
32
33     external S- conv. :  0.00 +- 0.00  ?
34     --- miscs -----
35     L_hyper mesic    :  0.00 +- 0.00  ?
36     L_hyper none-mesic :  0.00 +- 0.00  ?
37     S0_pi0_t         :  0.00 +- 0.00  ?
38     S0_pi0_t         :  0.00 +- 0.00  ?
39     -----

```