

```

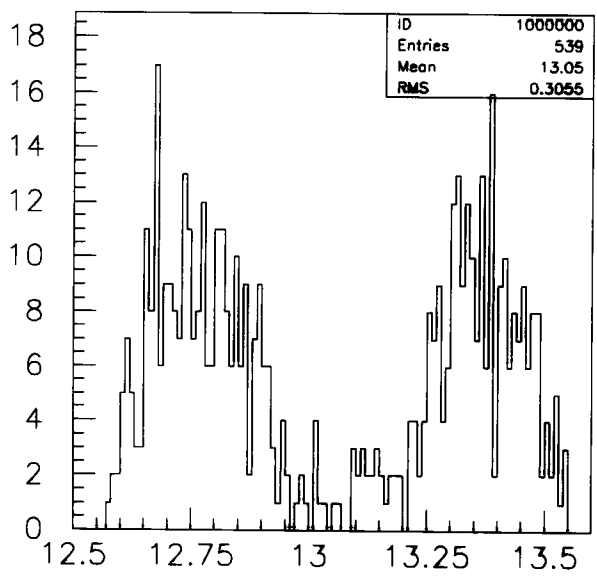
# Input namelist for 12C(a,g)16O reaction
# C.Ruiz 22.07.2003
# Note: All mass excesses in GeV
#       All widths in MeV
#       All elevels in MeV
$params
  life = 15*1000.
  level = 15*0.
  beamtyp = '12C'
  rectyp = '16O'
  zbeam = 6.
  abeam = 12.
  atarg = 4.
  ztarg = 2.
  zprod = 8.
  beamlifetime = 1000.
  beam_mass_excess = 0.0
  recoil_mass_excess = -4736.998E-6
  resenerg = 4.358
  part_width = 0.07
  gam_width = 0.000007
  spin_stat_fac = 5.
  ell = 1.
  rstate = 13
  level( 0) = 0.0
  level( 1) = 6.0494
  level( 2) = 6.12989
  level( 3) = 6.9171
  level( 4) = 7.11685
  level( 5) = 8.8719
  level( 6) = 9.585
  level( 7) = 9.8445
  level( 8) = 10.356
  level( 9) = 10.957
  level(10) = 11.080
  level(11) = 11.0967
  level(12) = 11.260
  level(13) = 11.520
  life( 0) = 1000.
  life( 1) = 67.E-12
  life( 2) = 18.4E-12
  life( 3) = 4.7E-15
  life( 4) = 8.3E-15
  life( 5) = 125.E-15
  life( 6) = 1.6E-21
  life( 7) = 1.06E-18
  life( 8) = 2.53E-20
  life( 9) = 5.5E-15
  life(10) = 5.5E-20
  life(11) = 2.4E-18
  life(12) = 2.6E-22
  br(1,1) = 100.
  md(1,1) = 0
  br(2,1) = 100.
  md(2,1) = 0
  br(3,1) = 99.97
  md(3,1) = 0
  br(3,2) = 0.027
  md(3,2) = 1
  br(3,3) = 0.008
  md(3,3) = 2

```

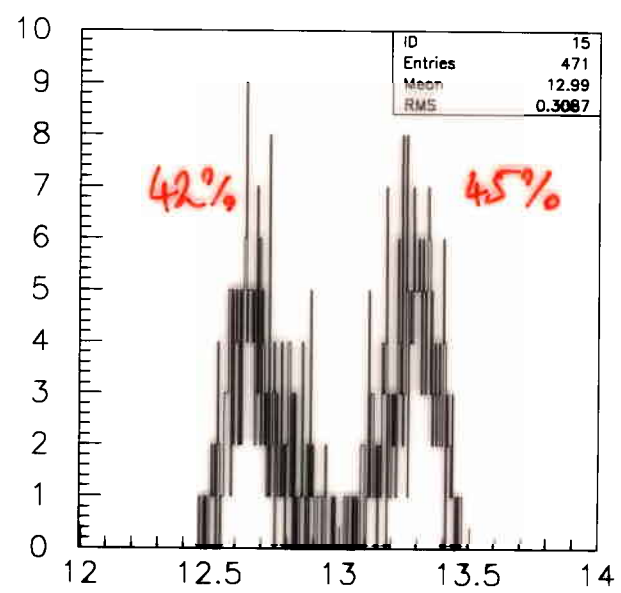
Sextupoles 3 and 4 normal

~ 87% transmission of 539 reactions

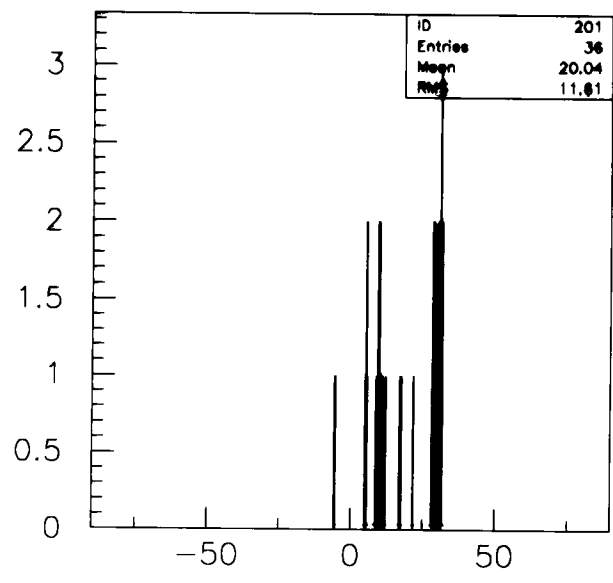
$P_1/P_2 = 95\%$



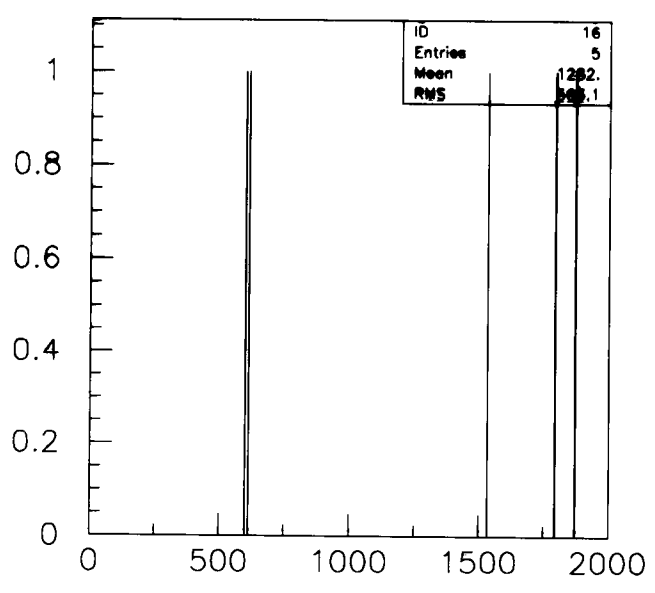
ezrec



Final Energy

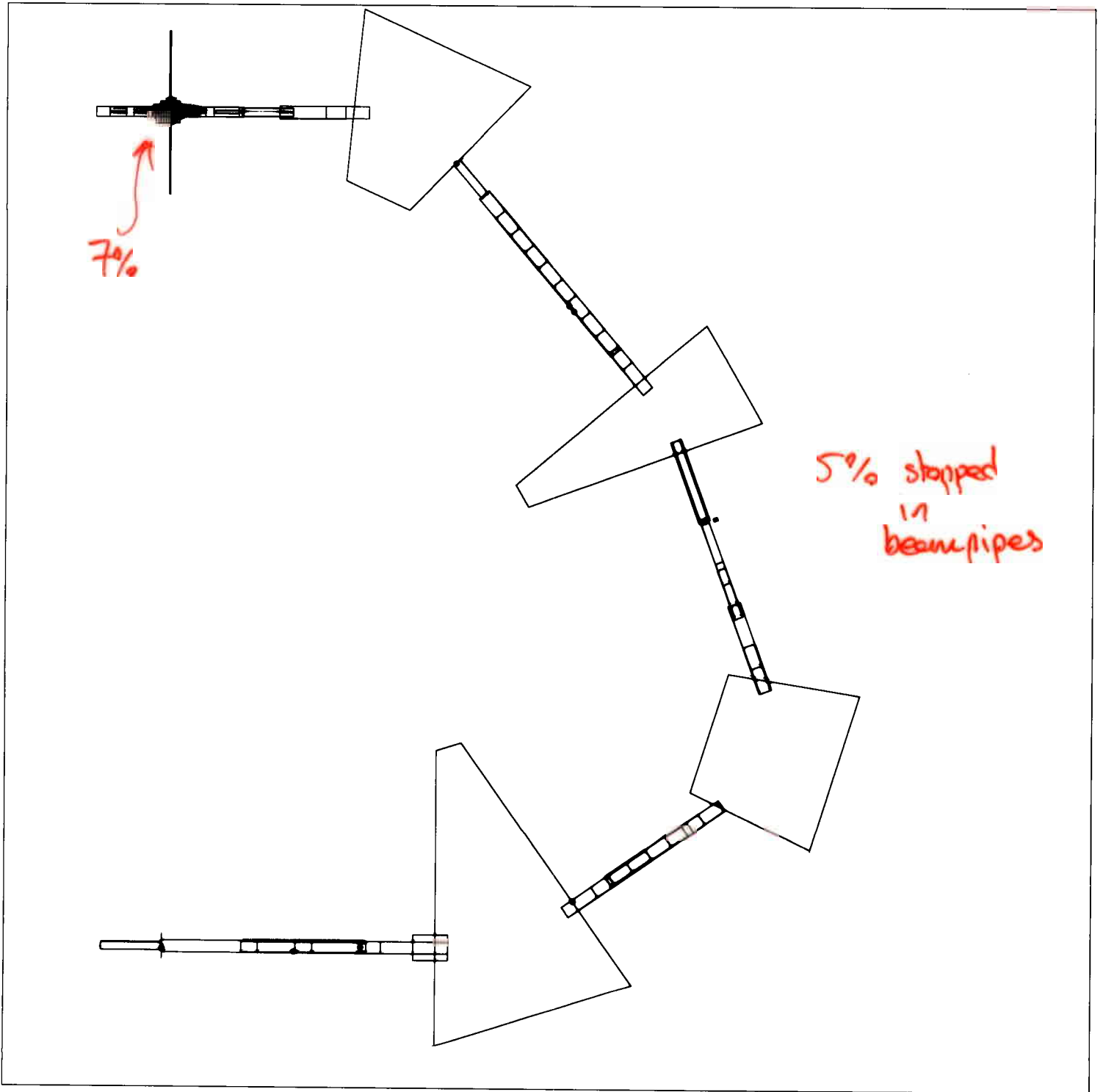


Z-Stops in all col



Stop Length (cm)

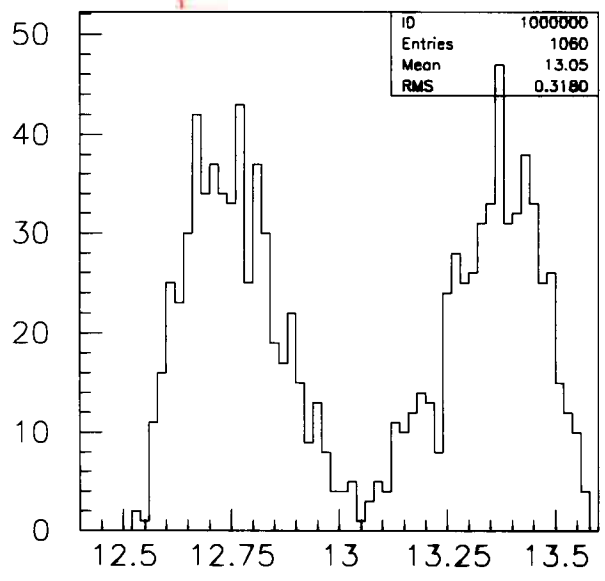
Sextupoles 3 and 4 normal



scintipiles 3 and 4 removed

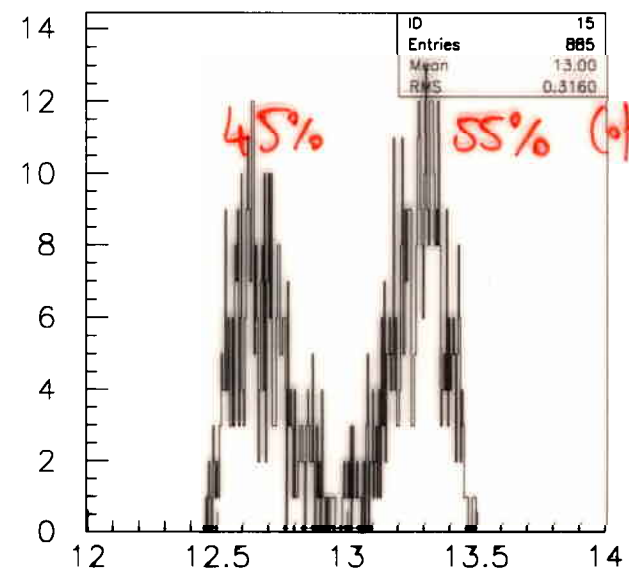
~ 84% transmission of 1060 reactions

$P_1/P_2 = 100\%$

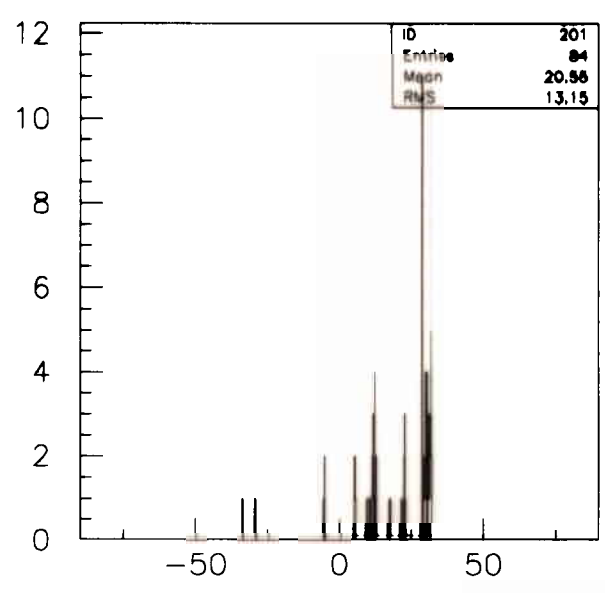


ezrec

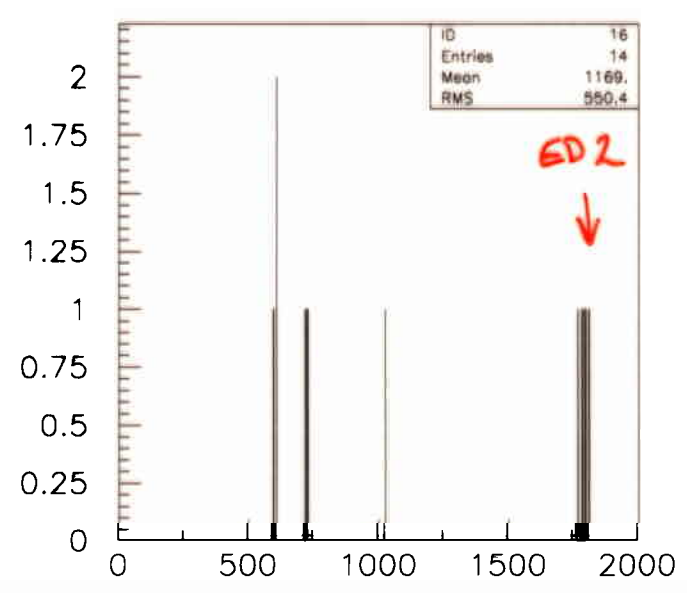
$P_1/P_2 = 83\%$



Final Energy



Z-Stops in all col



Stop Length (cm)



4.358 MeV resonance

$\uparrow \sim 70$ keV

Sextupoles 3 and 4 reversed

