

Mott Detector Energy Spectra (Normalized)

Cu 8 um Foil – Run 7362

RunTime = 490s

Beam Current = 1.15624 uA

Beam Momentum = 5.705 MeV

1/2 Wave Plate = IN

N_LEFT_p = 22754

N_LEFT_m = 18715

N_RIGHT_p = 19373

N_RIGHT_m = 23330

N_UP_p = 21887

N_UP_m = 22359

N_DOWN_p = 23170

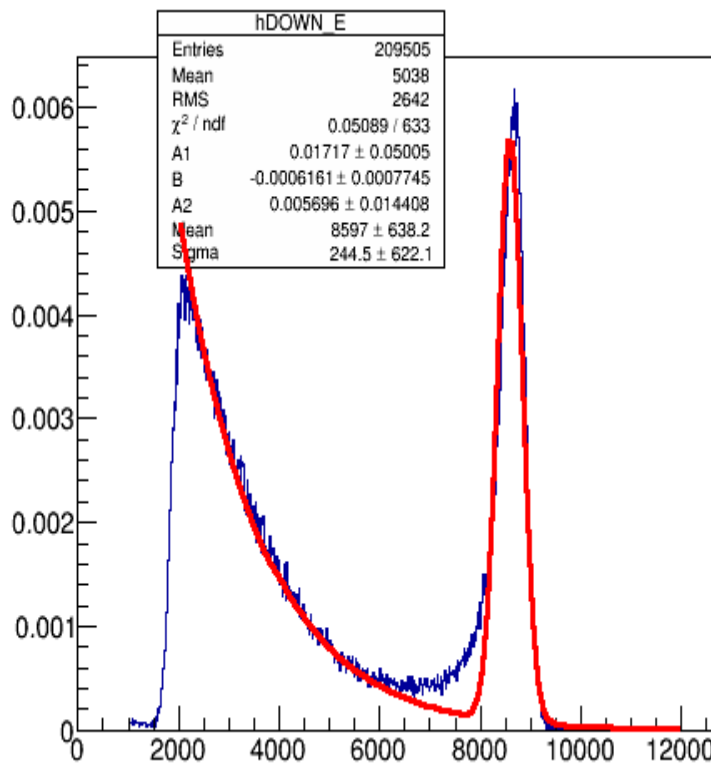
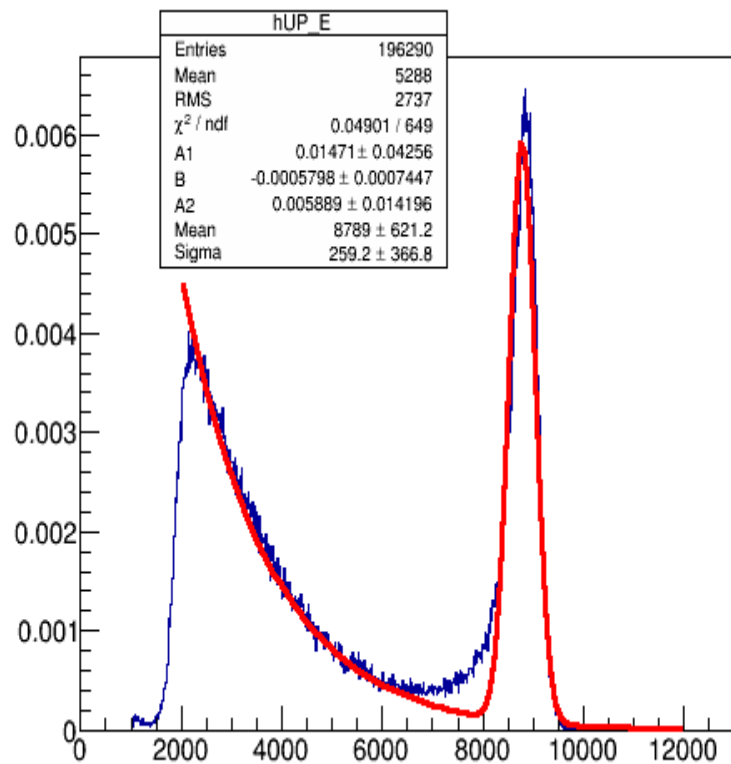
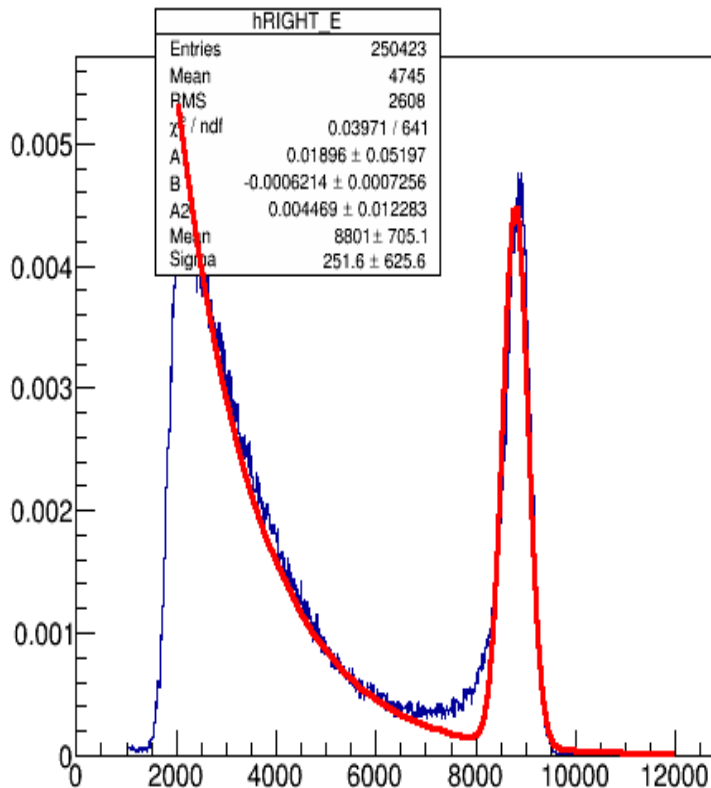
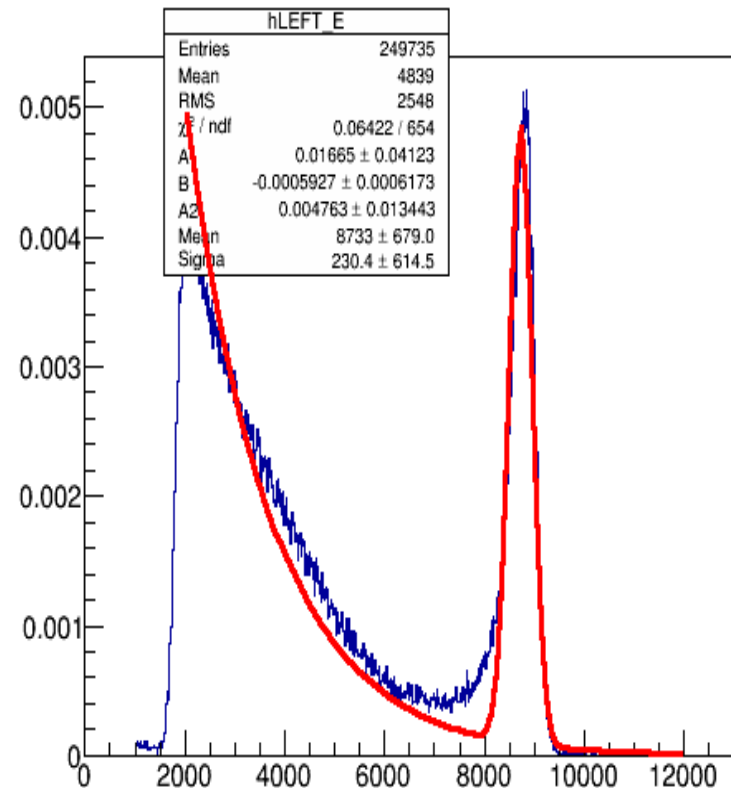
N_DOWN_m = 23134

Horizontal Mott Asymmetry

Ax_Phy (%) = 0.572269 +/- 0.332404

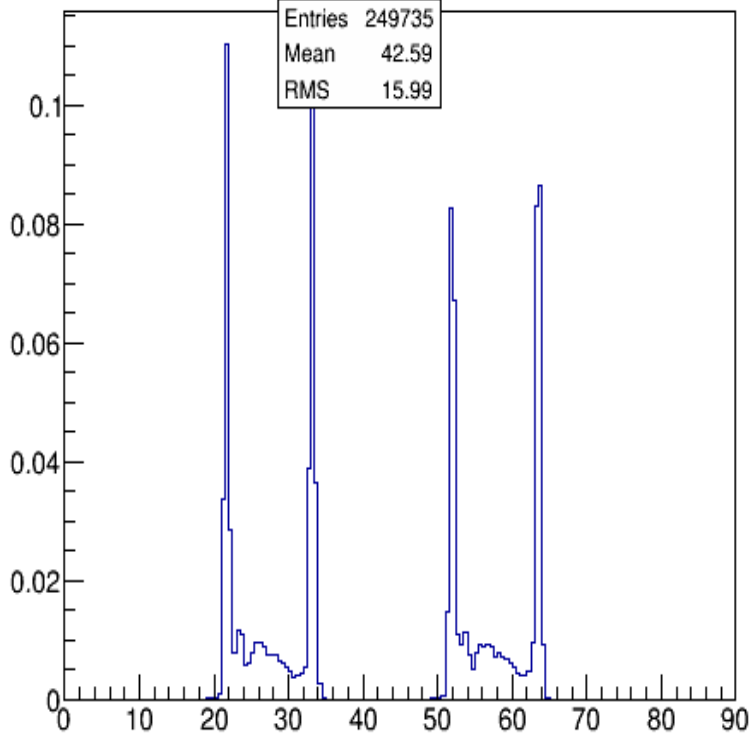
Vertical Mott Asymmetry

Ay_phy (%) = -9.50312 +/- 0.343159

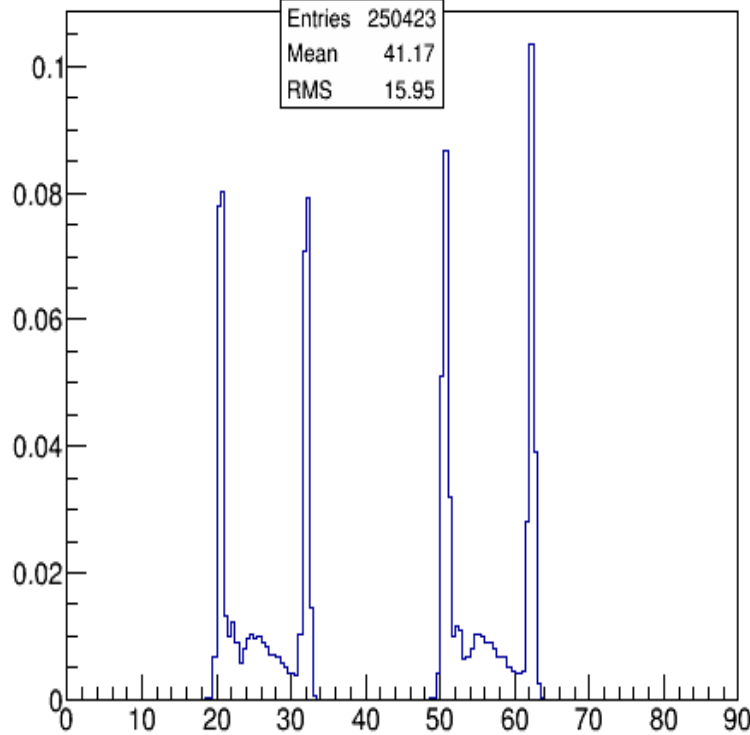


**Mott Time of Flight
Curves
(TDC17 - TDC18)**

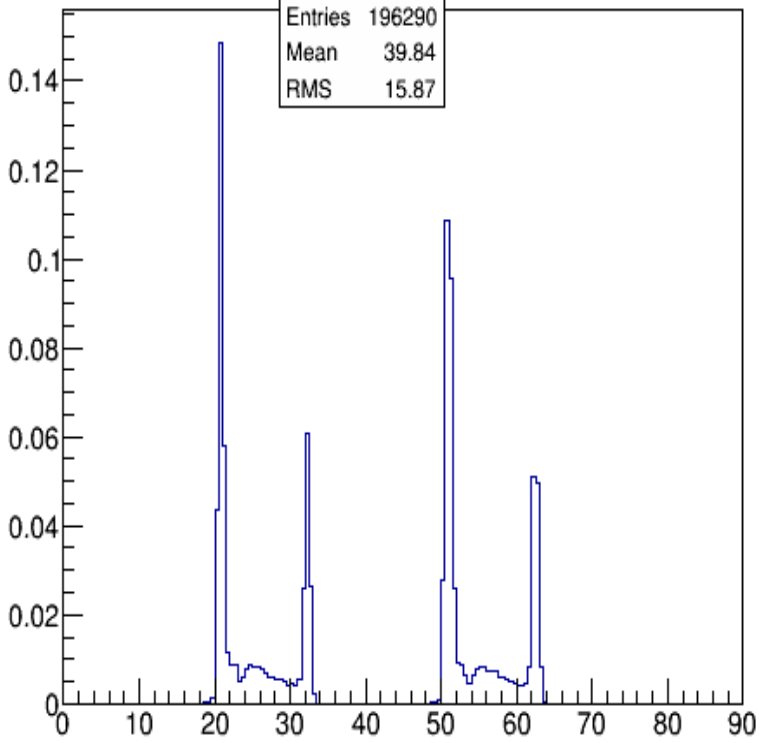
hLEFT_ToF
Entries 249735
Mean 42.59
RMS 15.99



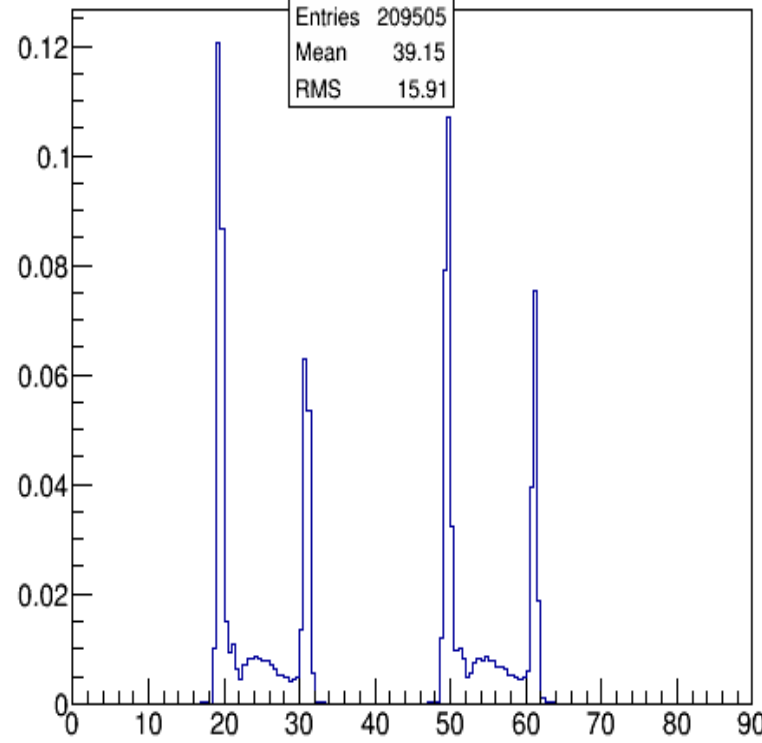
hRIGHT_ToF
Entries 250423
Mean 41.17
RMS 15.95



hUP_ToF
Entries 196290
Mean 39.84
RMS 15.87



hDOWN_ToF
Entries 209505
Mean 39.15
RMS 15.91



Mott Detector Energy Spectra (Normalized)

Cu 4.1 um Foil – Run 7373

RunTime = 724s

Beam Current = 1.26167 uA

Beam Momentum = 5.705 MeV

1/2 Wave Plate = OUT

N_LEFT_p = 13637

N_LEFT_m = 16741

N_RIGHT_p = 17093

N_RIGHT_m = 13717

N_UP_p = 16427

N_UP_m = 16400

N_DOWN_p = 17710

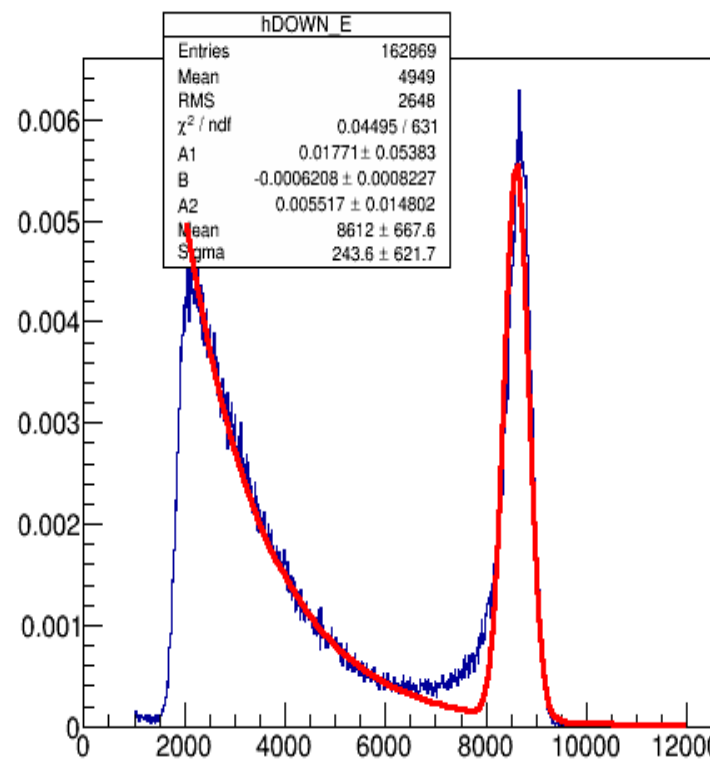
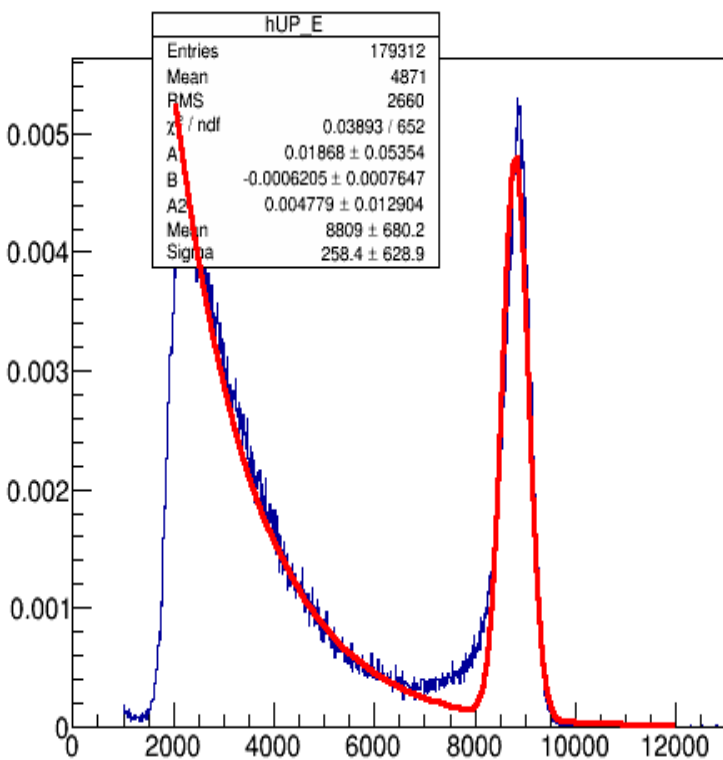
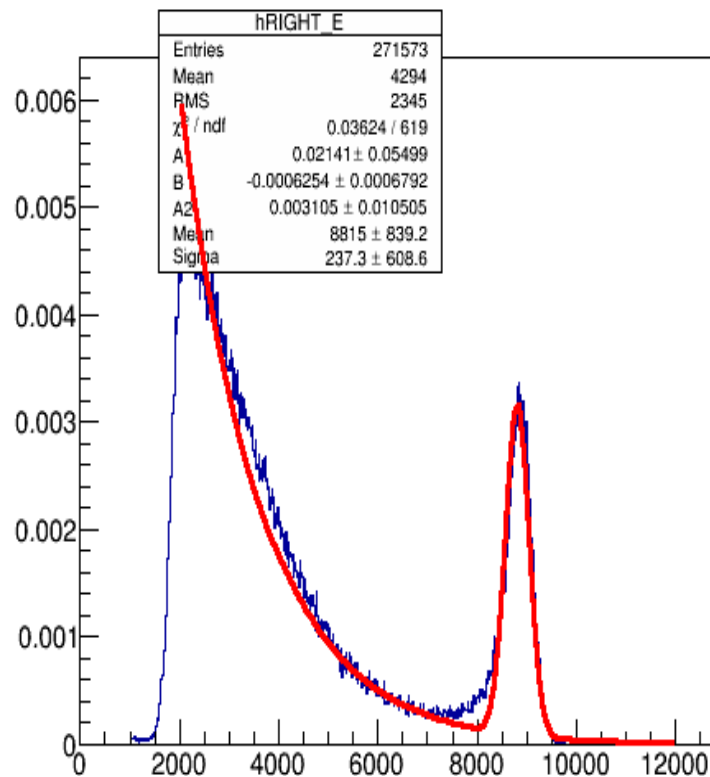
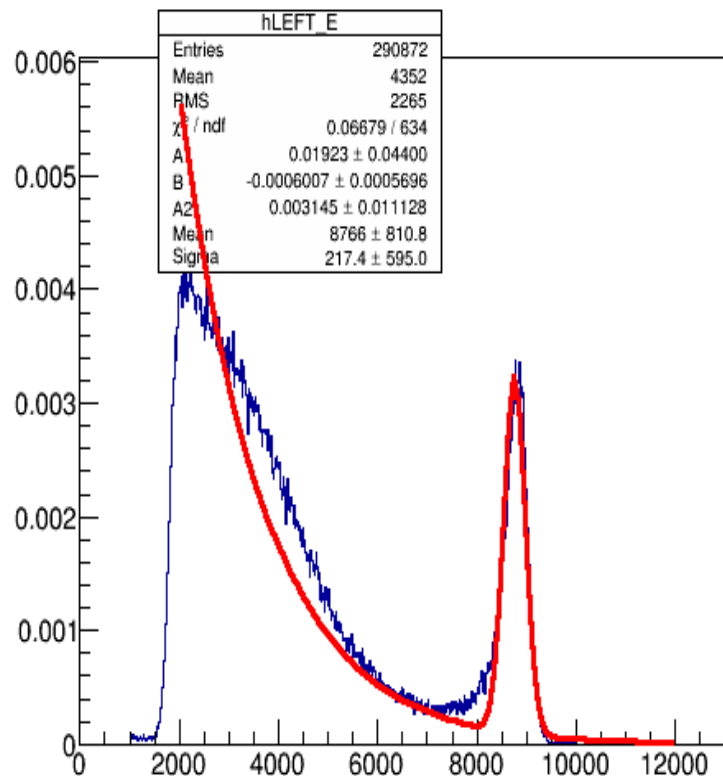
N_DOWN_m = 17220

Horizontal Mott Asymmetry

Ax_Phy (%) = 0.660315 +/- 0.384356

Vertical Mott Asymmetry

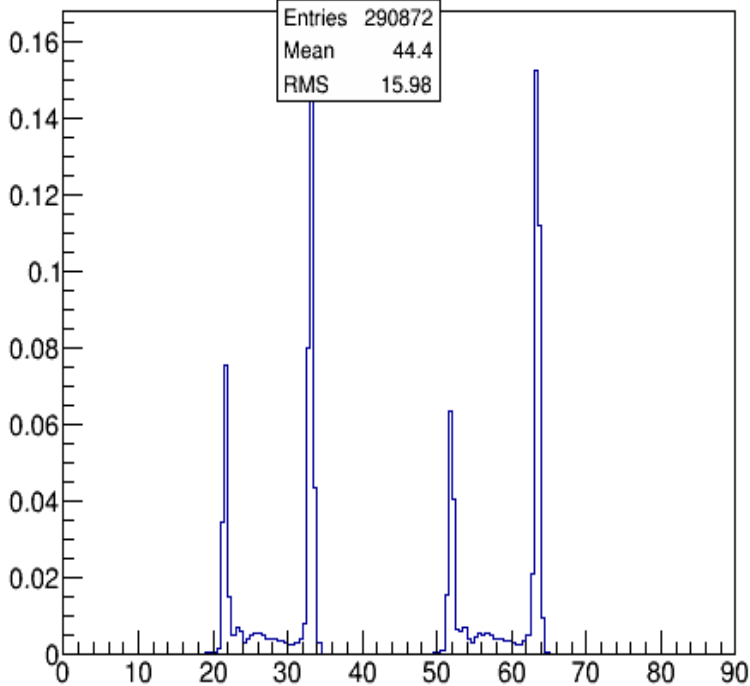
Ay_phy (%) = 10.5878 +/- 0.402005



Mott Time of Flight Curves (TDC17 - TDC18)

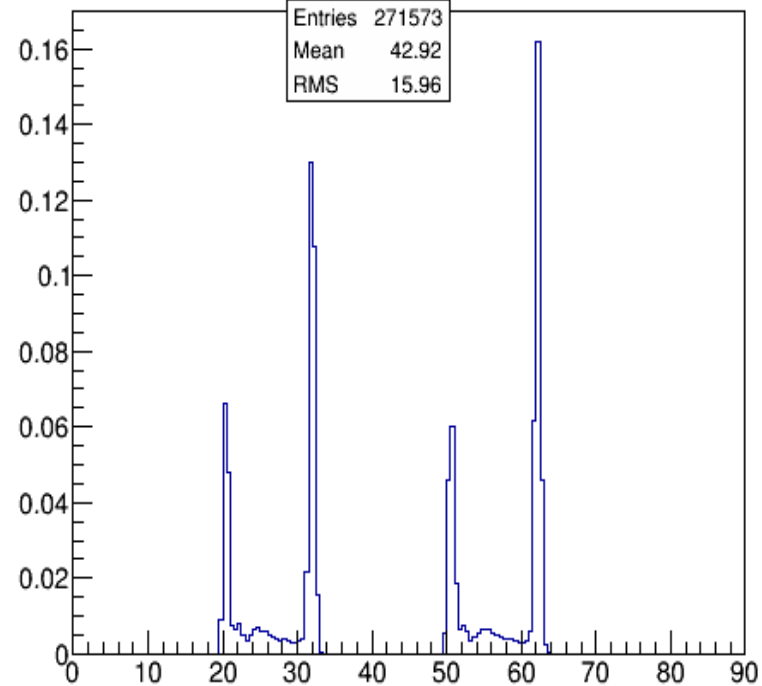
hLEFT_ToF

Entries 290872
Mean 44.4
RMS 15.98



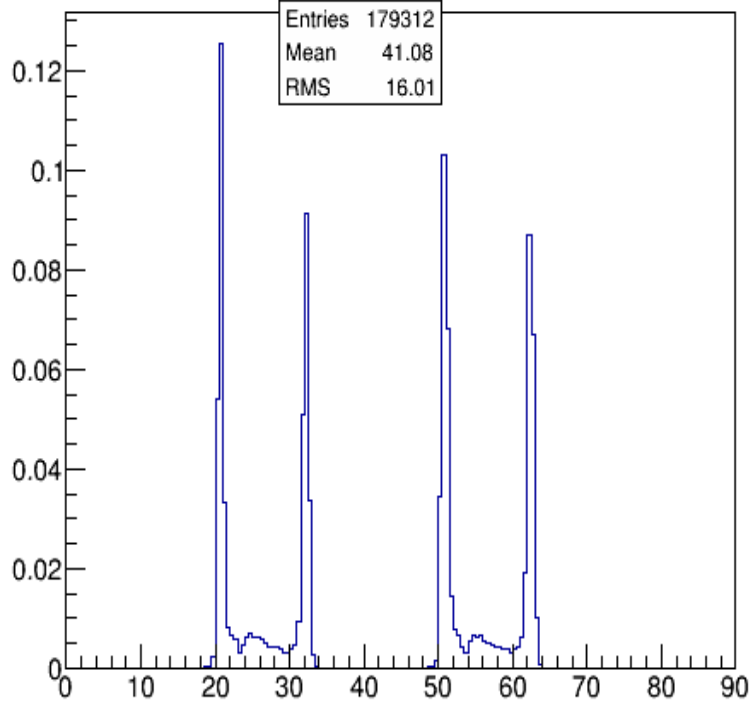
hRIGHT_ToF

Entries 271573
Mean 42.92
RMS 15.96



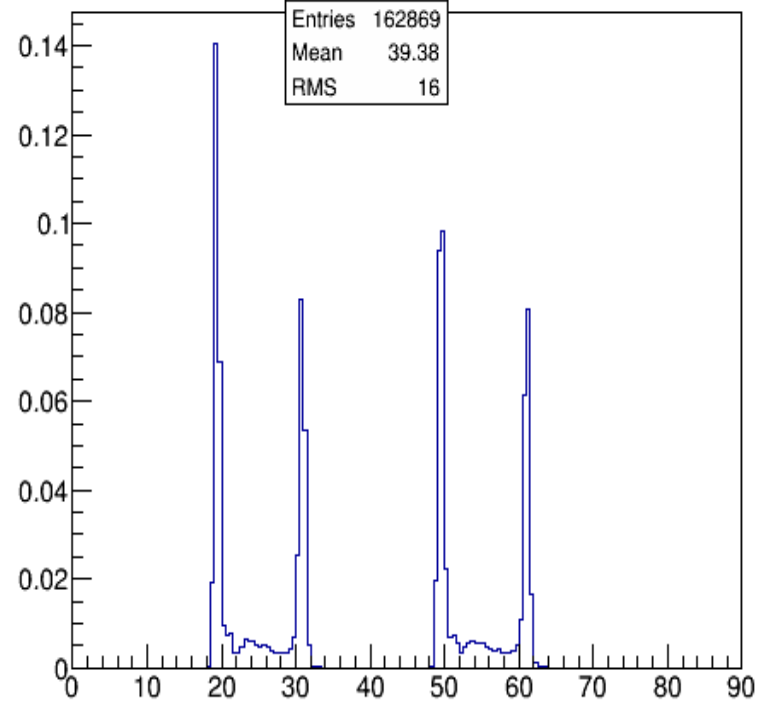
hUP_ToF

Entries 179312
Mean 41.08
RMS 16.01



hDOWN_ToF

Entries 162869
Mean 39.38
RMS 16



Mott Detector Energy Spectra (Normalized)

Cu 1 um Foil – Run 7365

RunTime = 724s

Beam Current = 1.17345 uA

Beam Momentum = 5.705 MeV

1/2 Wave Plate = IN

N_LEFT_p = 6627

N_LEFT_m = 5189

N_RIGHT_p = 5250

N_RIGHT_m = 6875

N_UP_p = 6391

N_UP_m = 6473

N_DOWN_p = 6715

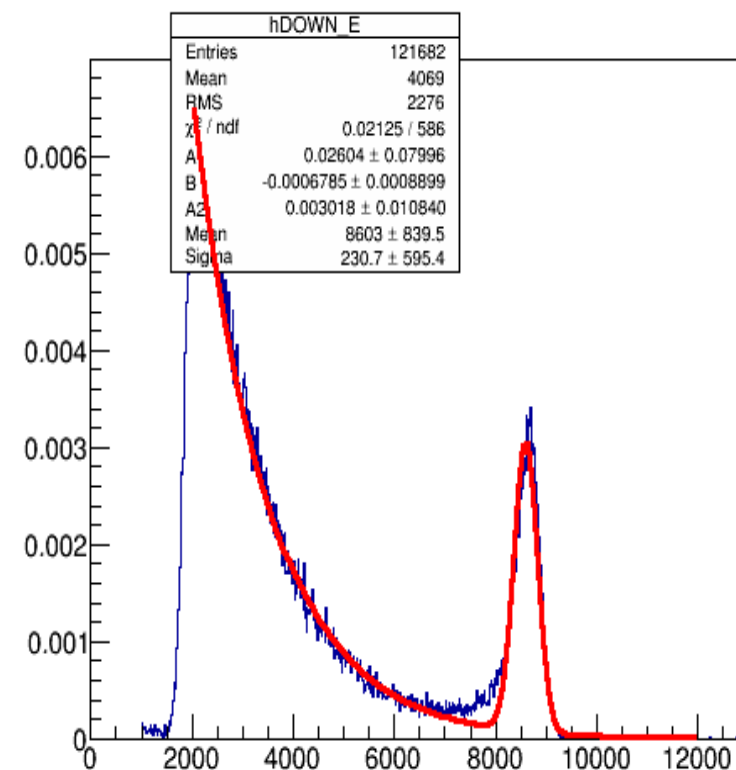
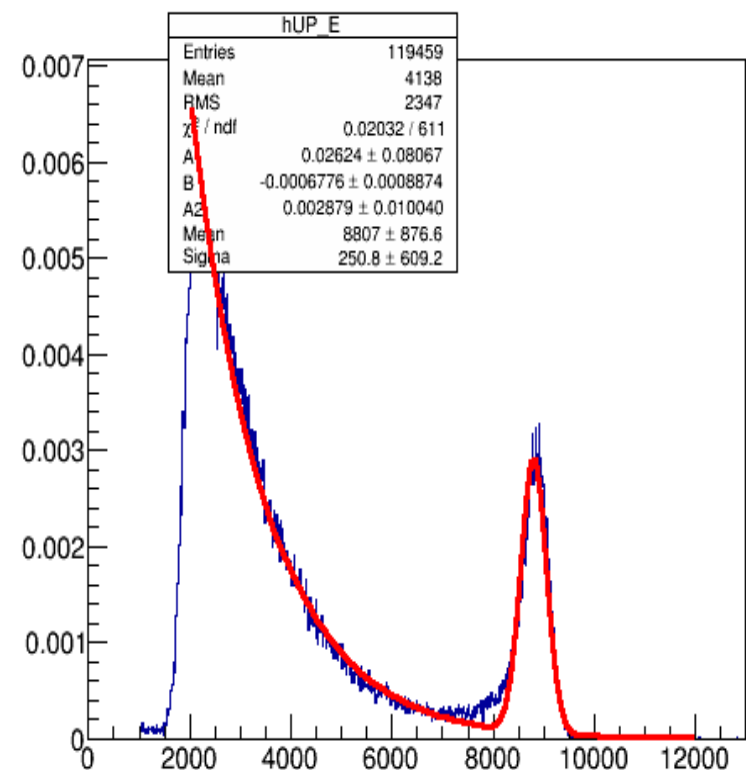
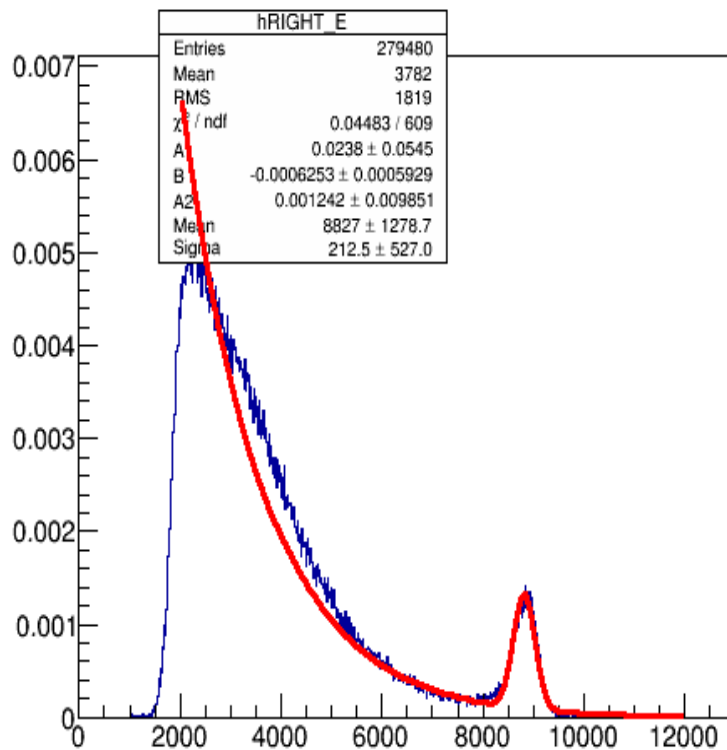
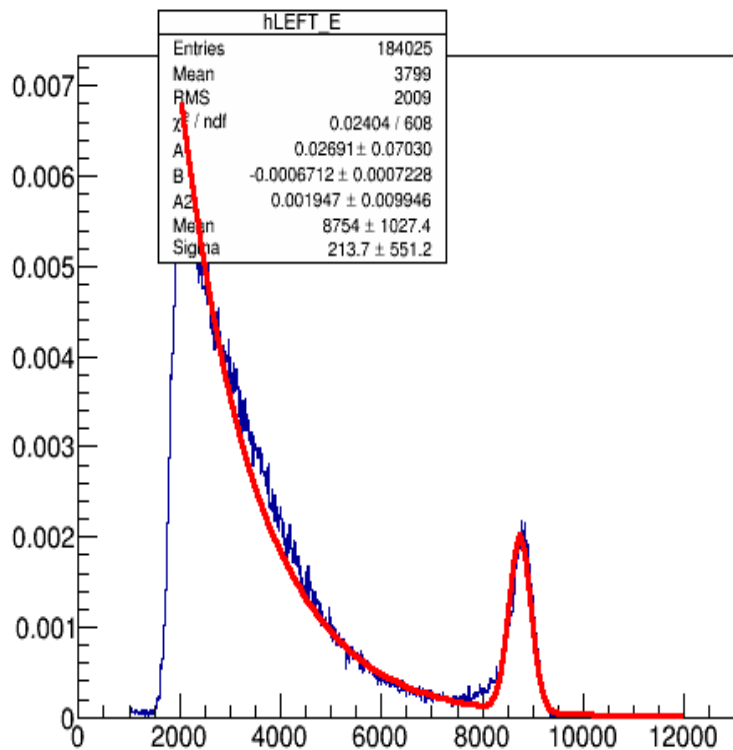
N_DOWN_m = 6903

Horizontal Mott Asymmetry

Ax_Phy (%) = -0.371582 +/- 0.61477

Vertical Mott Asymmetry

Ay_phy (%) = -12.7865 +/- 0.641047



**Mott Time of Flight
Curves
(TDC17 - TDC18)**

