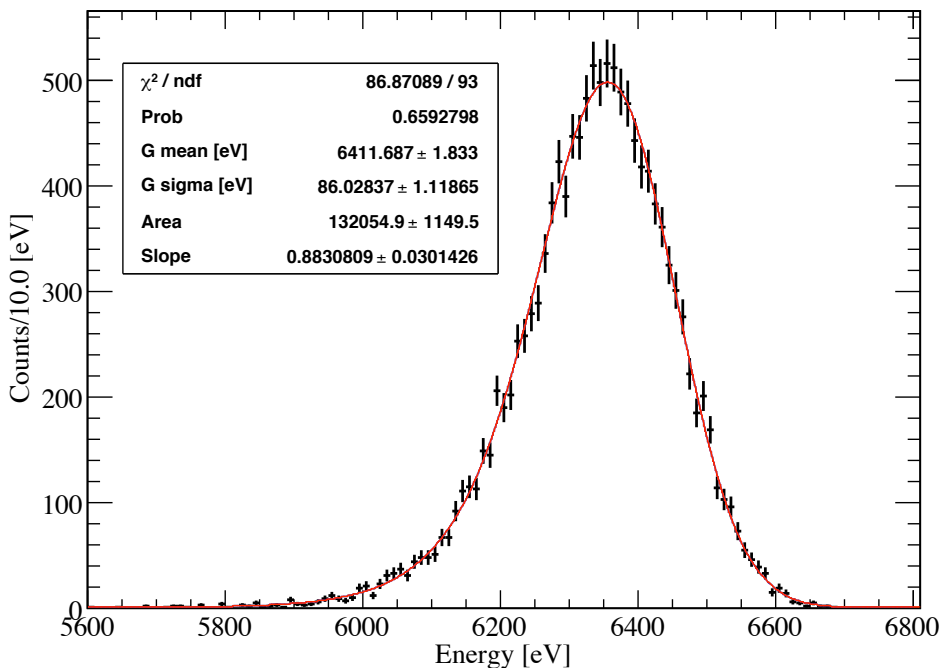


KHeX L alpha (6464.0 eV) fit

2nd cycle

Compton fit



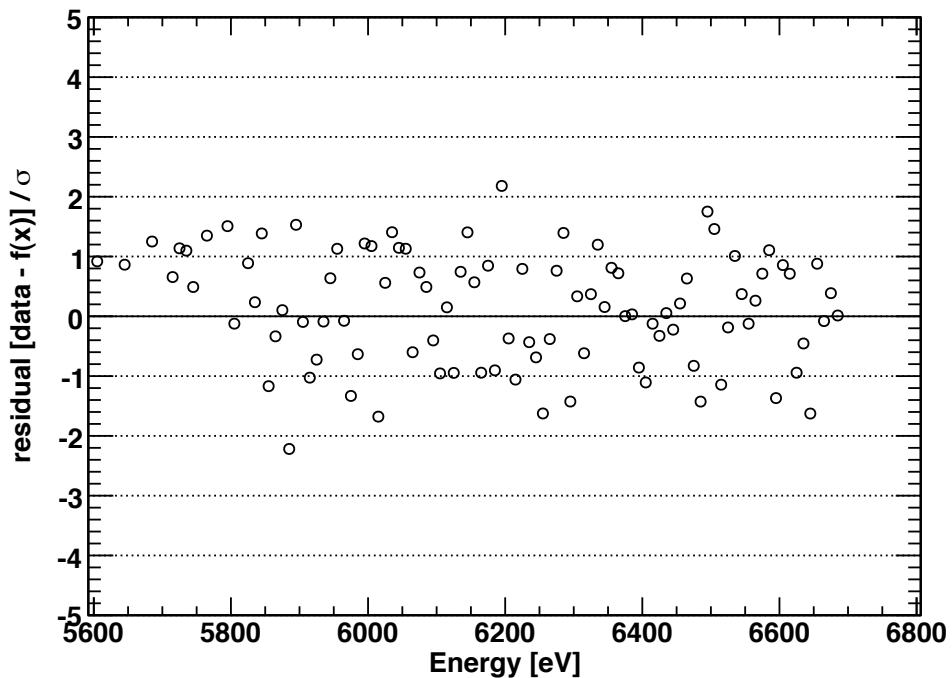
2nd cycle KHeX La (6464 eV)

only Compton tail

Bin-width : 10 eV

Fit region : 5600-6800 eV

fit residual



Chisqr/NDF = 86.9/93

2nd cycle KHeX La (6464 eV)

Simulation

[KHeX L-alpha (6464eV) 2nd cycle]

Number of Events

Total = 110803 +/- 332.871

Normal = 86968

Compton = 13321 +/- 115.417

Rayleigh = 10265

Compton other + escaped Rayleigh = 249

Ratios

Compton/Total = 0.120222 +/- 0.00110248

Compton/(Normal+Rayleigh) = 0.137001 +/- 0.00126571

only Compton tail

number of Compton event

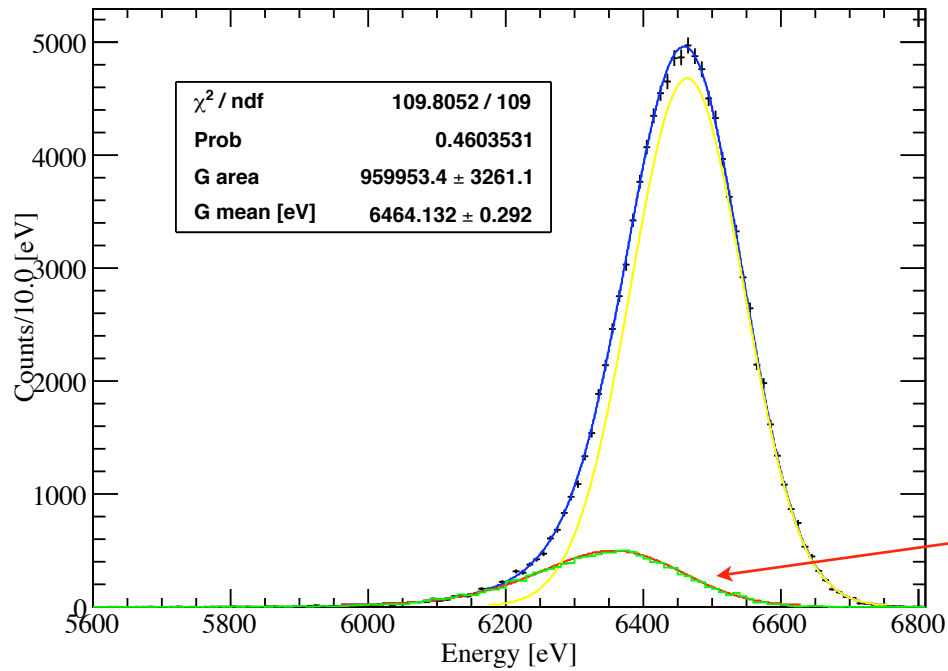
÷10 : area of the fit function

FCN=86.8709 FROM MINOS STATUS=SUCCESSFUL 144 CALLS 231 TOTAL
EDM=4.84696e-16 STRATEGY= 1 ERROR MATRIX

ACCURATE

NO.	EXT PARAMETER NAME	VALUE	PARABOLIC ERROR	MINOS ERRORS	
				NEGATIVE	POSITIVE
1	G mean [eV]	6.41169e+03	1.83317e+00	-1.84938e+00	1.81701e+00
2	G sigma [eV]	8.60284e+01	1.11903e+00	-1.11820e+00	1.11911e+00
3	Area	1.32055e+05	1.14949e+03	-1.14949e+03	1.14949e+03
4	Slope	8.83081e-01	3.01448e-02	-3.01054e-02	3.01798e-02

Total fit



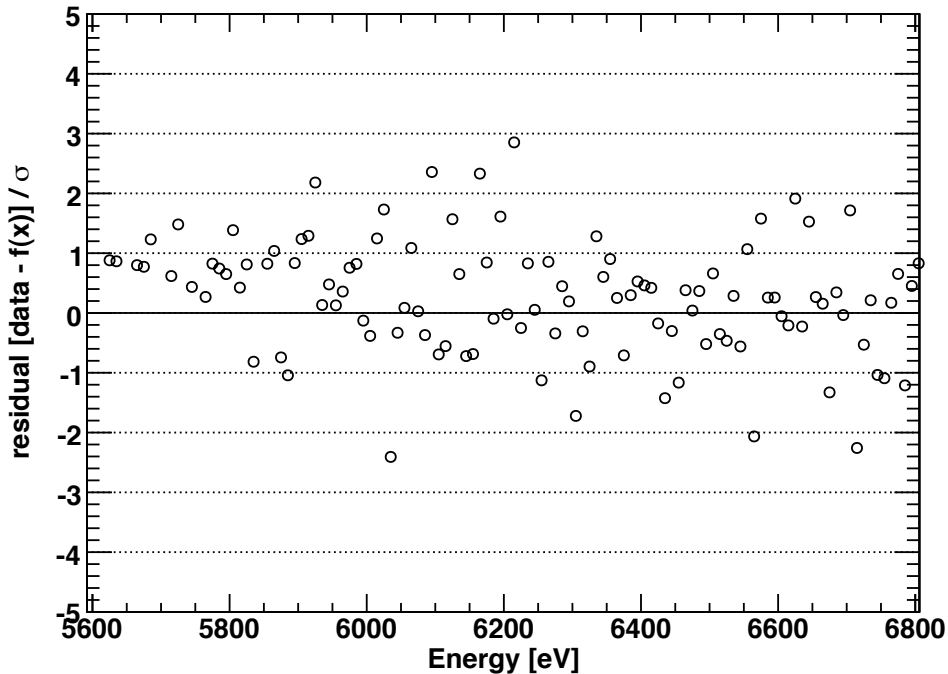
2nd cycle KHeX La (6464 eV)

$\Gamma=0$ eV : pure Gaussian

Total fit with fixed Compton tail

Tail parameters were fixed

fit residual



Bin-width : 10 eV

Fit region : 5600-6800 eV

Chisqr/NDF = 109.8/109

main Gauss mean = 6464.1 ± 0.3

Simulation

[KHeX L-alpha (6464eV) 2nd cycle]

Number of Events

Total = 110803 +- 332.871

Normal = 86968

Compton = 13321 +- 115.417

Rayleigh = 10265

Compton other + escaped Rayleigh = 249

Ratios

Compton/Total = 0.120222 +- 0.00110248

Compton/(Normal+Rayleigh) = 0.137001 +- 0.00126571

2nd cycle KHeX La (6464 eV)

$\Gamma=0$ eV : pure Gaussian

Total fit with fixed Compton tail

Compton area = 13290

(Normal+Ray) area = 95995.3

Ratio

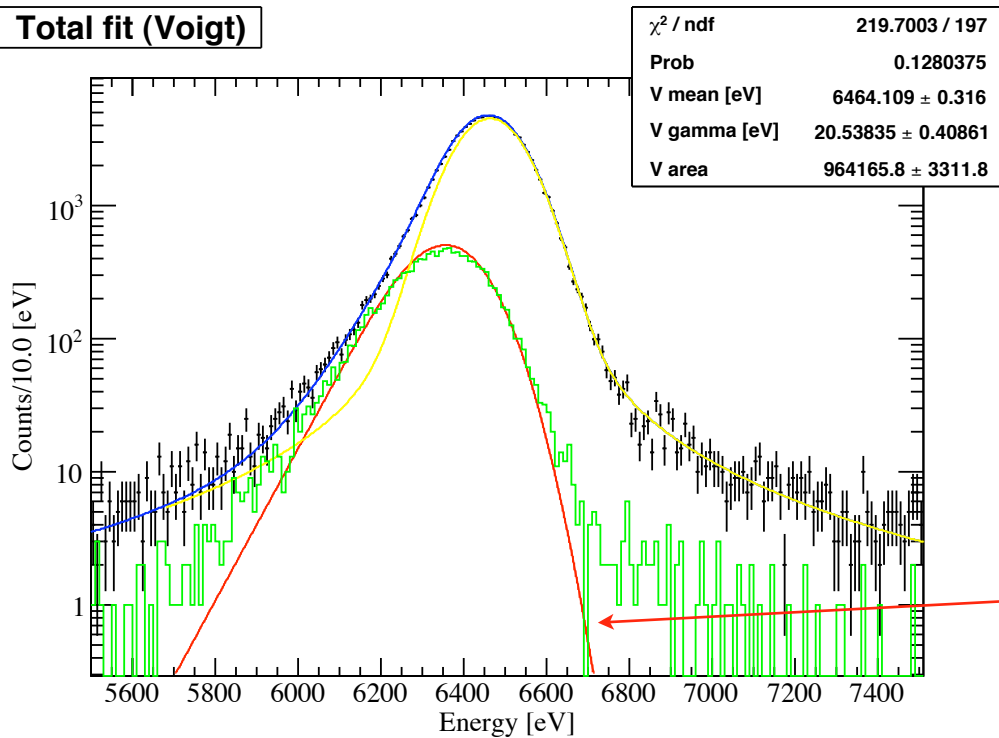
Compton/(Normal+Ray) = 0.138444

FCN=109.805 FROM MINOS STATUS=SUCCESSFUL 24 CALLS 63 TOTAL
EDM=3.54767e-08 STRATEGY= 1 ERROR MATRIX

ACCURATE

EXT	PARAMETER		PARABOLIC	MINOS ERRORS	
NO.	NAME	VALUE	ERROR	NEGATIVE	POSITIVE
1	g mean [eV]	6.41354e+03	fixed		
2	g sigma [eV]	8.79800e+01	fixed		
3	t area	1.32900e+05	fixed		
4	t slope	8.75800e-01	fixed		
5	G area	9.59953e+05	3.26107e+03	-3.26141e+03	3.26072e+03
6	G mean [eV]	6.46413e+03	2.91500e-01	-2.91526e-01	2.91474e-01
7	G sigma [eV]	8.19596e+01	fixed		

Total fit (Voigt)



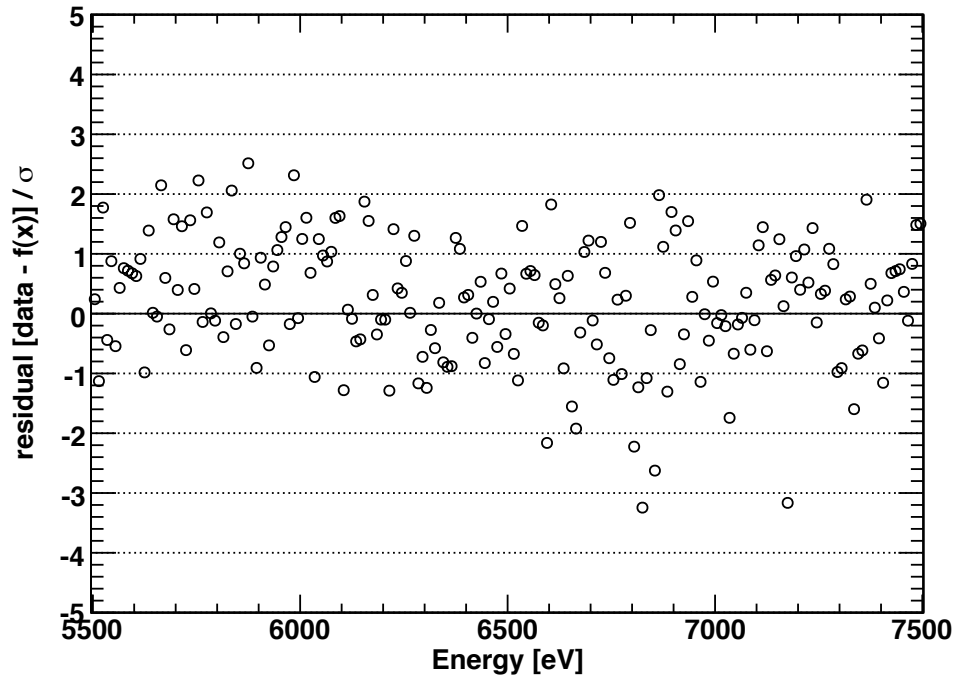
2nd cycle KHeX La (6464 eV)

$\Gamma=20$ eV : Voigt profile

Total fit with fixed Compton tail

Tail parameters were fixed from the **Gauss*Exp convolution (Not Voigt)**

fit residual



Bin-width : 10 eV

Fit region : 5500-7500 eV

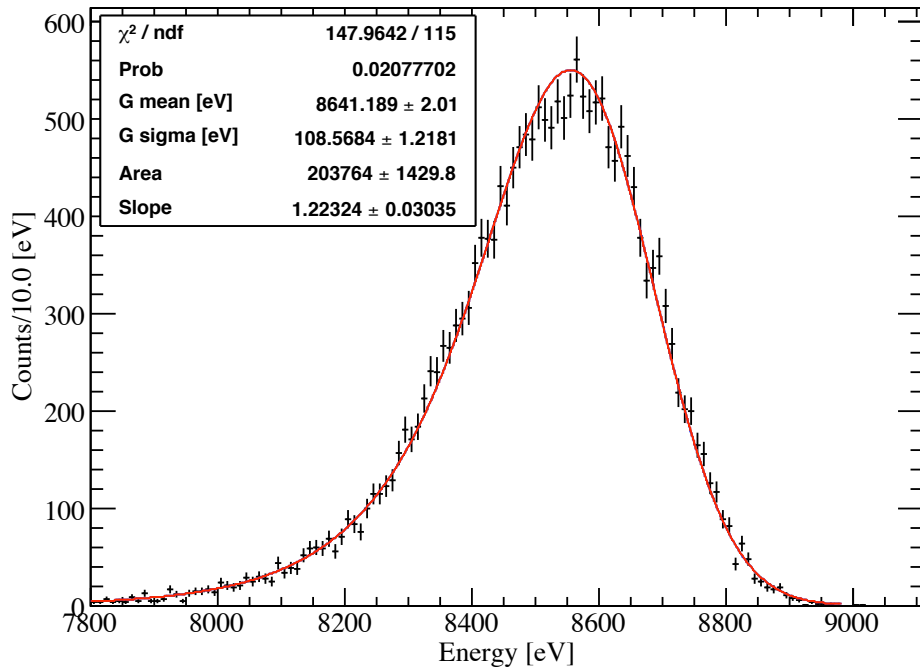
mean = 6464.1 ± 0.3

gamma = 20.5 ± 0.4

KHeX L beta (8723.0 eV) fit

1st cycle

Compton fit



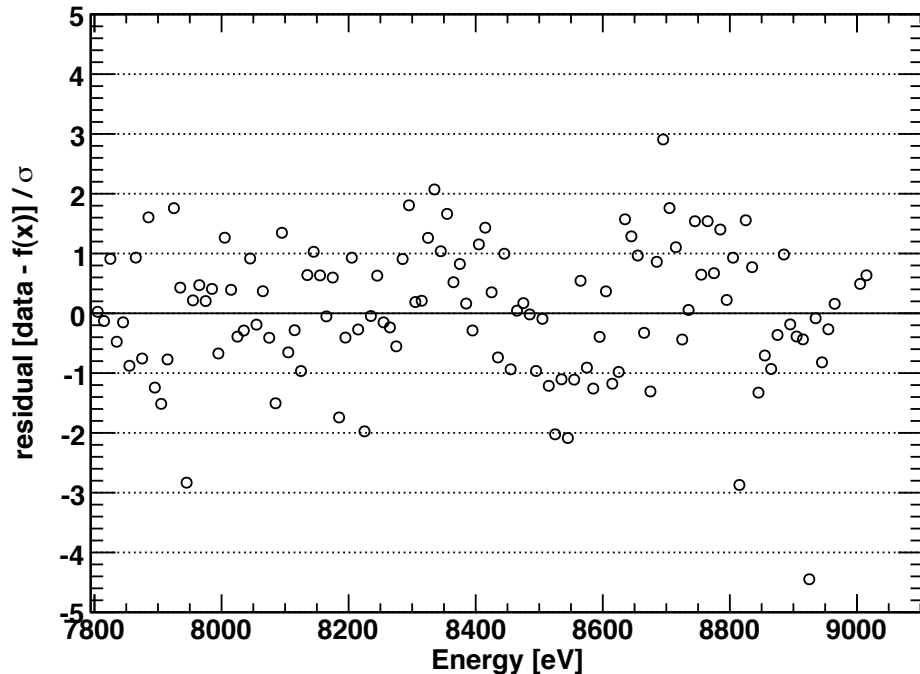
1st cycle KHeX Lb (8723 eV)

only Compton tail

Bin-width : 10 eV

Fit region : 7800-9100 eV

fit residual



Chisqr/NDF = 148.0/115

1st cycle KHeX Lb (8723 eV)

Simulation

[KHeX L-beta (8723eV) 1st cycle]

Number of Events

Total = 138959 +- 372.772

Normal = 109679

Compton = 20575 +- 143.44

Rayleigh = 8246

Compton other + escaped Rayleigh = 459

Ratios

Compton/Total = 0.148065 +- 0.00110603

Compton/(Normal+Rayleigh) = 0.174475 +- 0.00131821

only Compton tail

number of Compton event

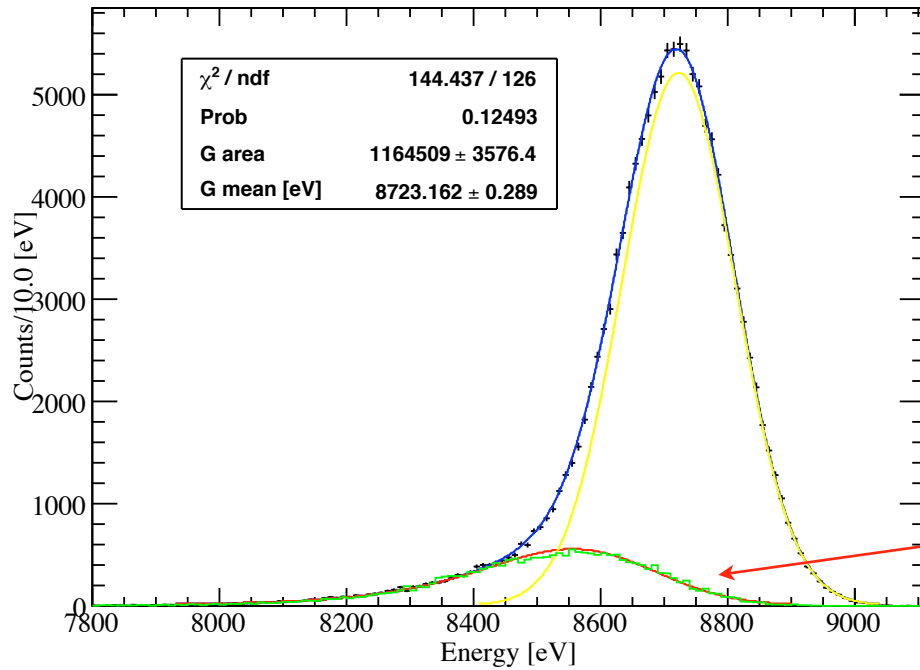
÷10 : area of the fit function

FCN=147.964 FROM MINOS STATUS=SUCCESSFUL 158 CALLS 245 TOTAL
EDM=5.35527e-16 STRATEGY= 1 ERROR MATRIX

ACCURATE

NO.	EXT PARAMETER NAME	VALUE	PARABOLIC ERROR	MINOS ERRORS	
				NEGATIVE	POSITIVE
1	G mean [eV]	8.64119e+03	2.01198e+00	-2.01887e+00	2.00200e+00
2	G sigma [eV]	1.08568e+02	1.21895e+00	-1.21886e+00	1.21738e+00
3	Area	2.03764e+05	1.42982e+03	-1.42983e+03	1.42983e+03
4	Slope	1.22324e+00	3.03679e-02	-3.01401e-02	3.05511e-02

Total fit



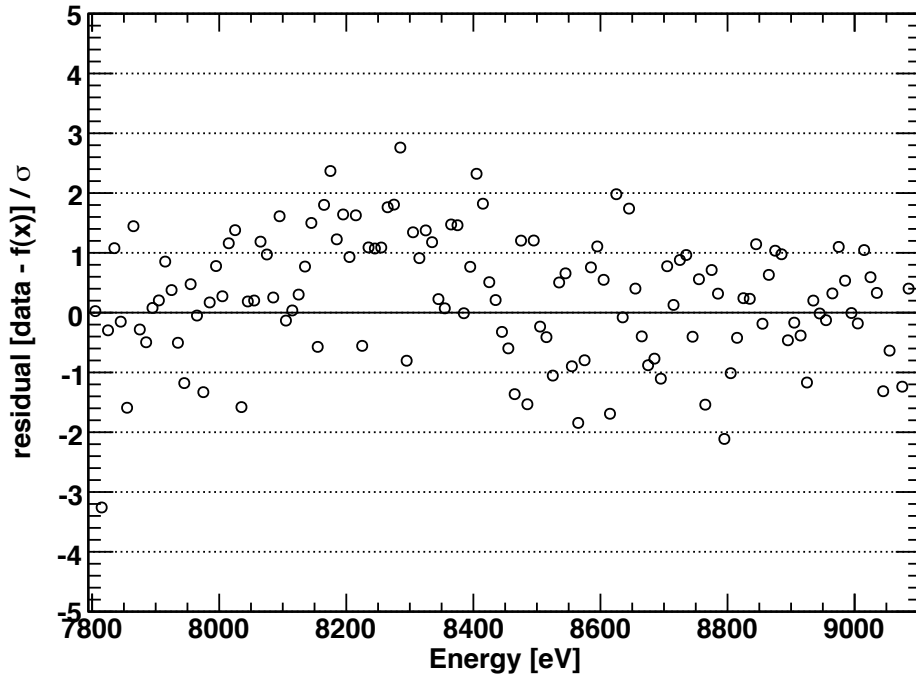
1st cycle KHeX Lb (8723 eV)

$\Gamma=0$ eV : pure Gaussian

Total fit with fixed Compton tail

Tail parameters were fixed

fit residual



Bin-width : 10 eV

Fit region : 7800-9100 eV

Chisqr/NDF = 144.4/126

main Gauss mean = 8723.2 \pm 0.3

Simulation

[KHeX L-beta (8723eV) 1st cycle]

Number of Events

Total = 138959 +- 372.772

Normal = 109679

Compton = 20575 +- 143.44

Rayleigh = 8246

Compton other + escaped Rayleigh = 459

Ratios

Compton/Total = 0.148065 +- 0.00110603

Compton/(Normal+Rayleigh) = 0.174475 +- 0.00131821

1st cycle KHeX Lb (8723 eV)

$\Gamma=0$ eV : pure Gaussian

Total fit with fixed Compton tail

Compton area = 20376.4
(Normal+Ray) area = 116451

Ratio

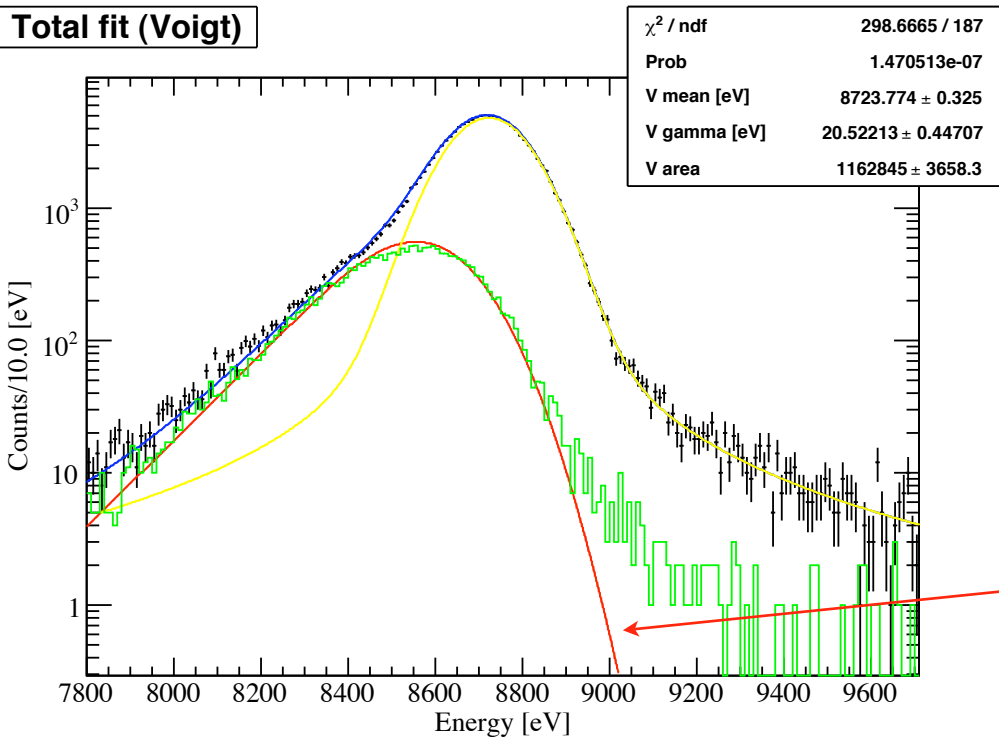
Compton/(Normal+Ray) = 0.174978

FCN=144.437 FROM MINOS STATUS=SUCCESSFUL 24 CALLS 64 TOTAL
EDM=5.52604e-08 STRATEGY= 1 ERROR MATRIX

ACCURATE

EXT	PARAMETER		PARABOLIC	MINOS ERRORS	
NO.	NAME	VALUE	ERROR	NEGATIVE	POSITIVE
1	g mean [eV]	8.64119e+03	fixed		
2	g sigma [eV]	1.08568e+02	fixed		
3	t area	2.03764e+05	fixed		
4	t slope	1.22324e+00	fixed		
5	G area	1.16451e+06	3.57641e+03	-3.57693e+03	3.57587e+03
6	G mean [eV]	8.72316e+03	2.88804e-01	-2.88831e-01	2.88778e-01
7	G sigma [eV]	8.92488e+01	fixed		

Total fit (Voigt)



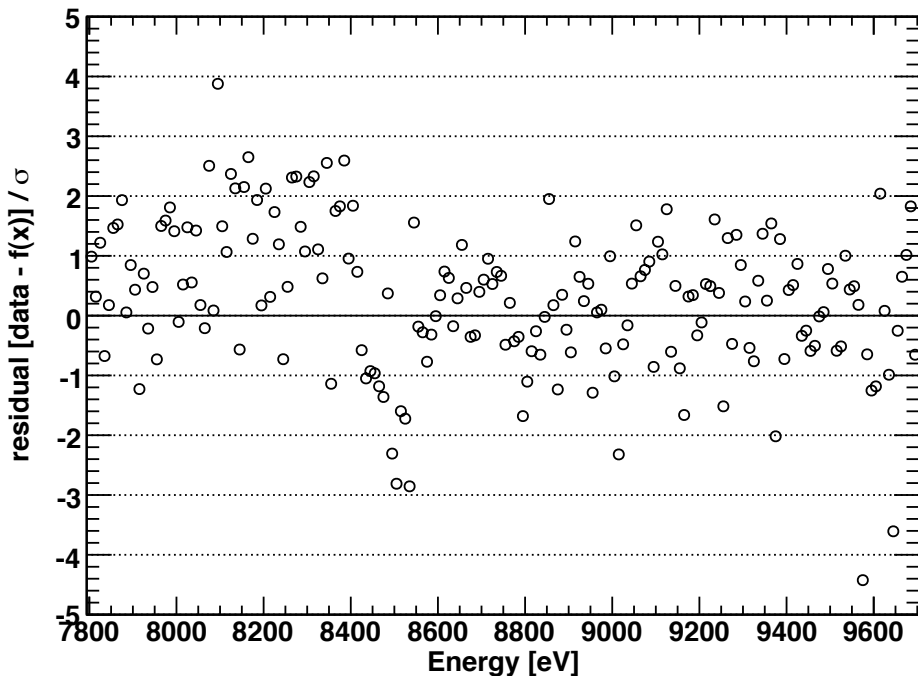
1st cycle KHeX Lb (8723 eV)

$\Gamma=20$ eV : Voigt profile

Total fit with fixed Compton tail

Tail parameters were fixed from the **Gauss*Exp convolution (Not Voigt)**

fit residual



Bin-width : 10 eV

Fit region : 7800-9700 eV

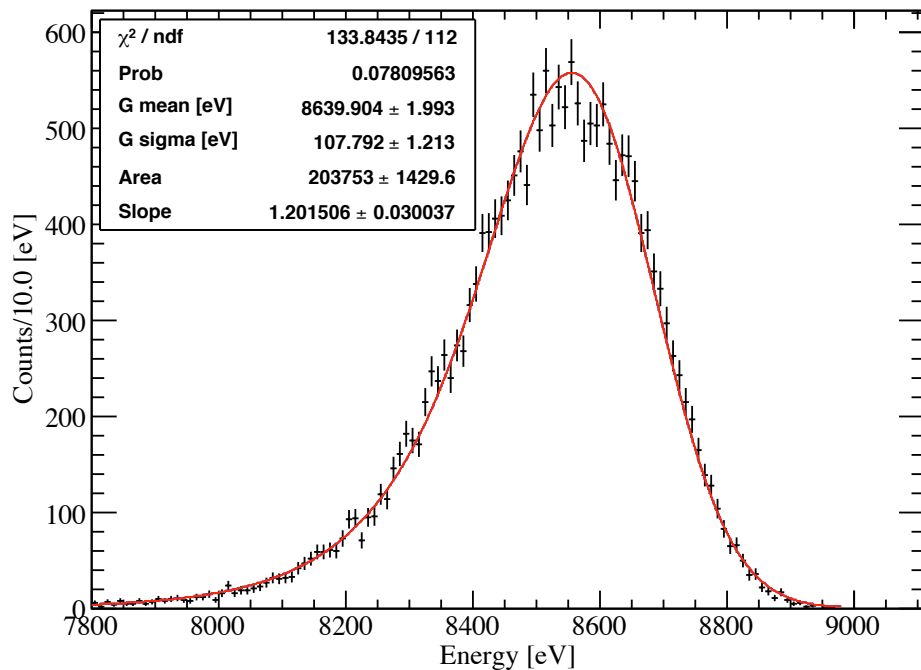
mean = 8723.8 \pm 0.3

gamma = 20.5 \pm 0.4

KHeX L beta (8723.0 eV) fit

2nd cycle

Compton fit



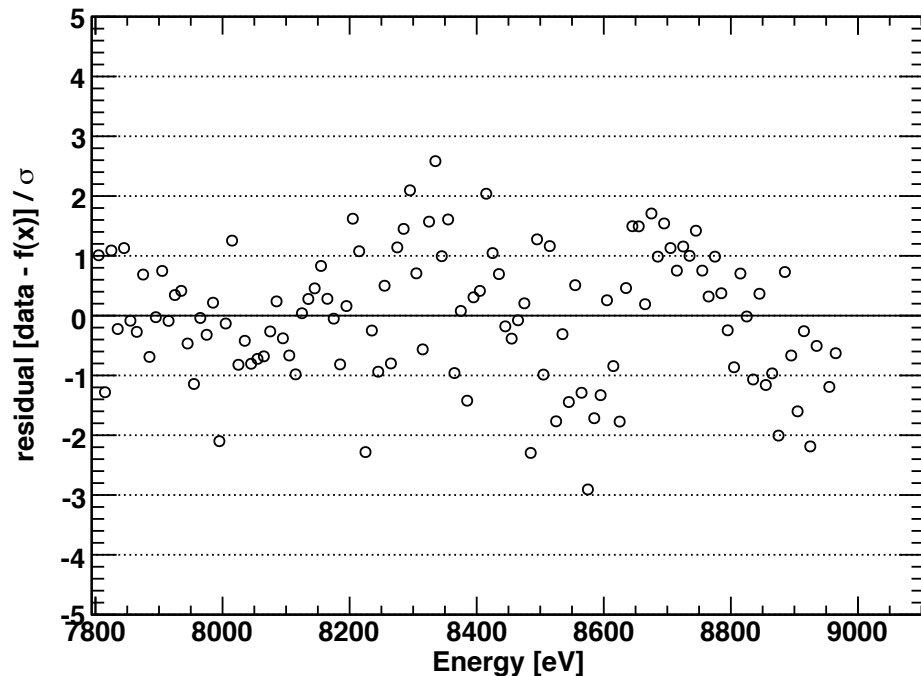
2nd cycle KHeX Lb (8723 eV)

only Compton tail

Bin-width : 10 eV

Fit region : 7800-9100 eV

fit residual



Chisqr/NDF = 133.8/112

2nd cycle KHeX Lb (8723 eV)

Simulation

[KHeX L-beta (8723eV) 2nd cycle]

Number of Events

Total = 138587 +- 372.273

Normal = 109305

Compton = 20554 +- 143.367

Rayleigh = 8298

Compton other + escaped Rayleigh = 430

Ratios

Compton/Total = 0.148311 +- 0.00110855

Compton/(Normal+Rayleigh) = 0.174774 +- 0.00132132

only Compton tail

number of Compton event

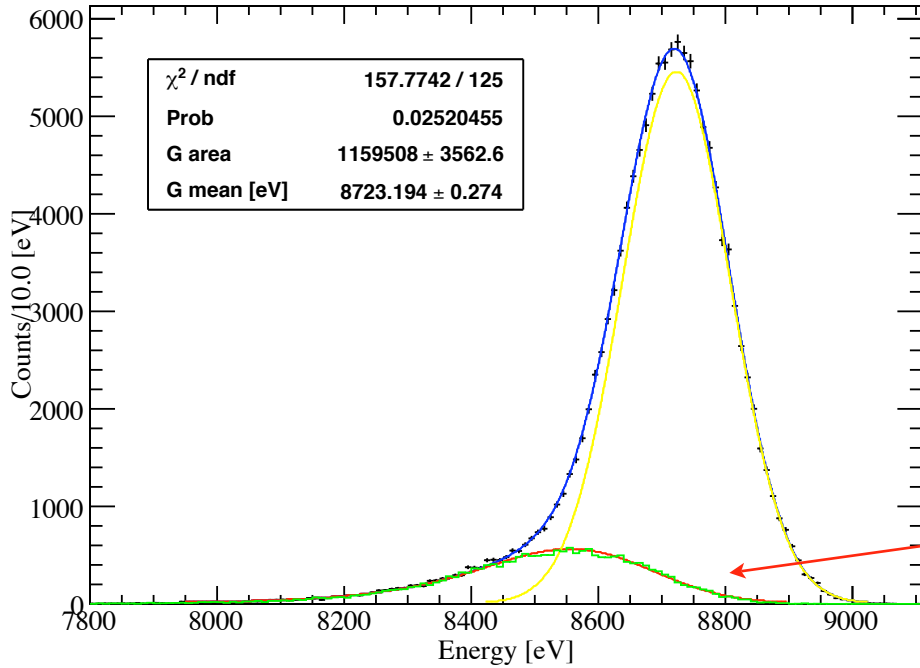
÷10 : area of the fit function

FCN=133.844 FROM MINOS STATUS=SUCCESSFUL 146 CALLS 226 TOTAL
EDM=8.86193e-09 STRATEGY= 1 ERROR MATRIX

ACCURATE

NO.	EXT PARAMETER NAME	VALUE	PARABOLIC ERROR	MINOS ERRORS	
				NEGATIVE	POSITIVE
1	G mean [eV]	8.63990e+03	1.99298e+00	-2.00133e+00	1.98465e+00
2	G sigma [eV]	1.07792e+02	1.21257e+00	-1.21284e+00	1.21224e+00
3	Area	2.03753e+05	1.42957e+03	-1.42949e+03	1.42965e+03
4	Slope	1.20151e+00	3.00338e-02	-2.98388e-02	3.02349e-02

Total fit



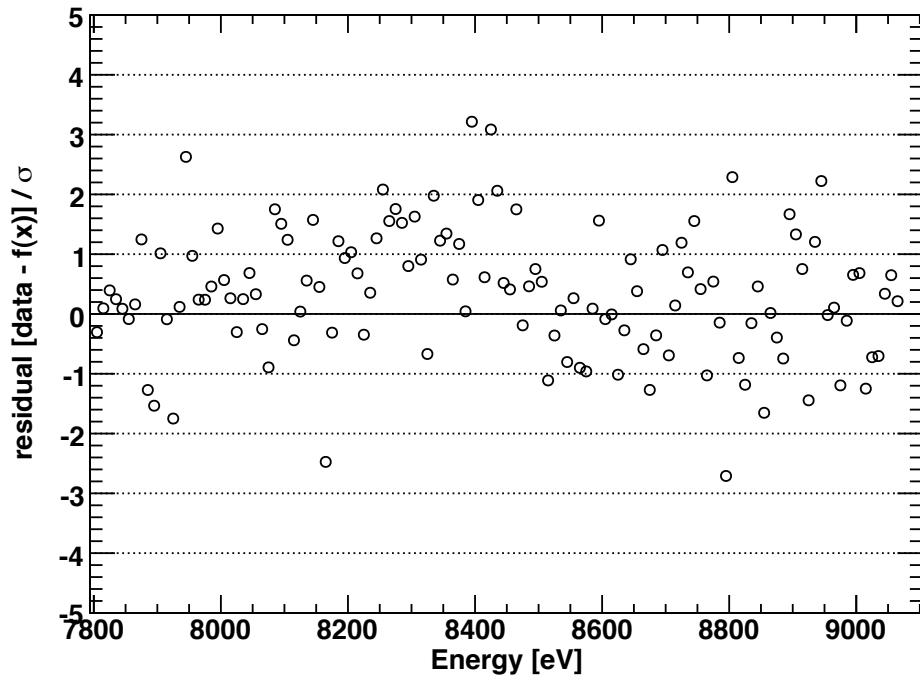
2nd cycle KHeX Lb (8723 eV)

$\Gamma=0$ eV : pure Gaussian

**Total fit with
fixed Compton tail**

Tail parameters were fixed

fit residual



Bin-width : 10 eV

Fit region : 7800-9100 eV

Chisqr/NDF = 157.8/125

main Gauss mean = 8723.2 ± 0.3

Simulation

[KHeX L-beta (8723eV) 2nd cycle]

Number of Events

Total = 138587 +- 372.273

Normal = 109305

Compton = 20554 +- 143.367

Rayleigh = 8298

Compton other + escaped Rayleigh = 430

Ratios

Compton/Total = 0.148311 +- 0.00110855

Compton/(Normal+Rayleigh) = 0.174774 +- 0.00132132

2nd cycle KHeX Lb (8723 eV)

$\Gamma=0$ eV : pure Gaussian

Total fit with fixed Compton tail

Compton area = 20375.3

(Normal+Ray) area = 115951

Ratio

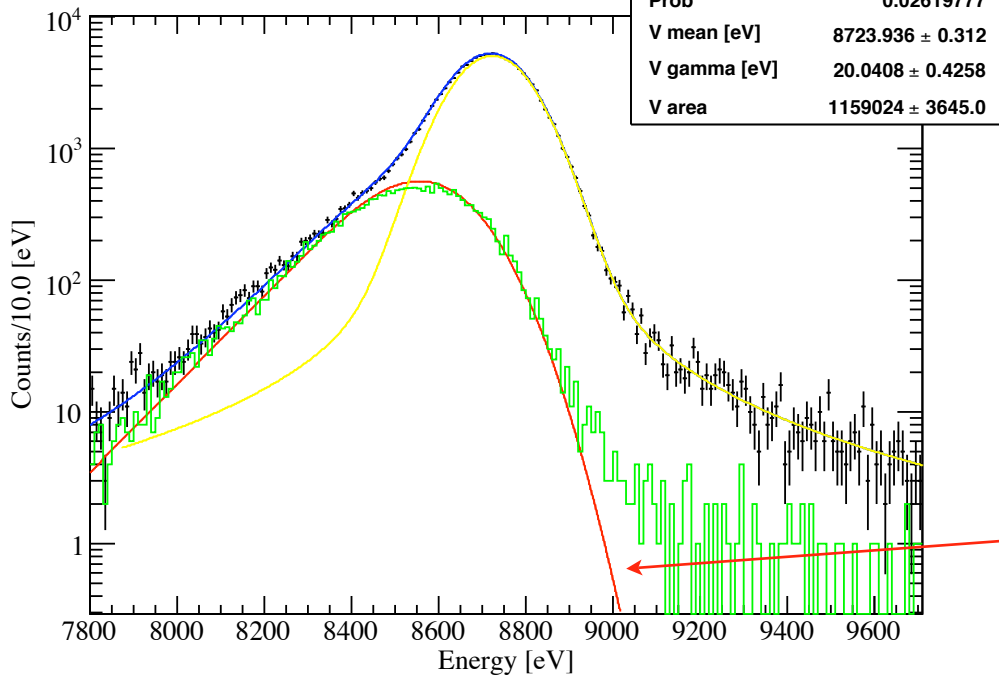
Compton/(Normal+Ray) = 0.175724

FCN=157.774 FROM MINOS STATUS=SUCCESSFUL 24 CALLS 64 TOTAL
EDM=5.86129e-08 STRATEGY= 1 ERROR MATRIX

ACCURATE

EXT	PARAMETER		PARABOLIC	MINOS ERRORS	
NO.	NAME	VALUE	ERROR	NEGATIVE	POSITIVE
1	g mean [eV]	8.63990e+03	fixed		
2	g sigma [eV]	1.07792e+02	fixed		
3	t area	2.03753e+05	fixed		
4	t slope	1.20151e+00	fixed		
5	G area	1.15951e+06	3.56261e+03	-3.56315e+03	3.56205e+03
6	G mean [eV]	8.72319e+03	2.74455e-01	-2.74483e-01	2.74429e-01
7	G sigma [eV]	8.48950e+01	fixed		

Total fit (Voigt)



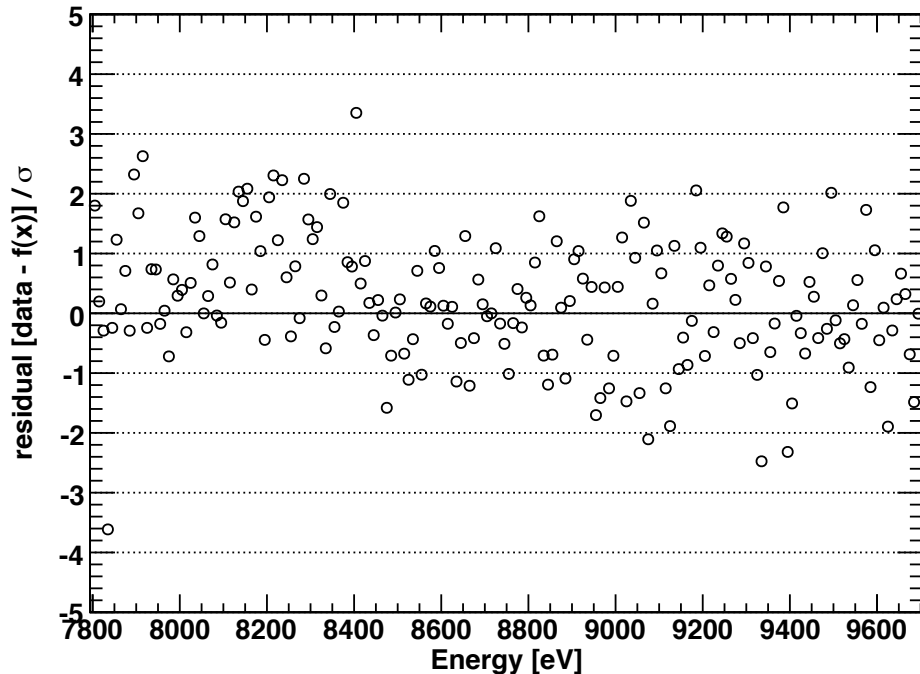
2nd cycle KHeX Lb (8723 eV)

$\Gamma=20$ eV : Voigt profile

Total fit with fixed Compton tail

Tail parameters were fixed from the **Gauss*Exp convolution (Not Voigt)**

fit residual



Bin-width : 10 eV

Fit region : 7800-9700 eV

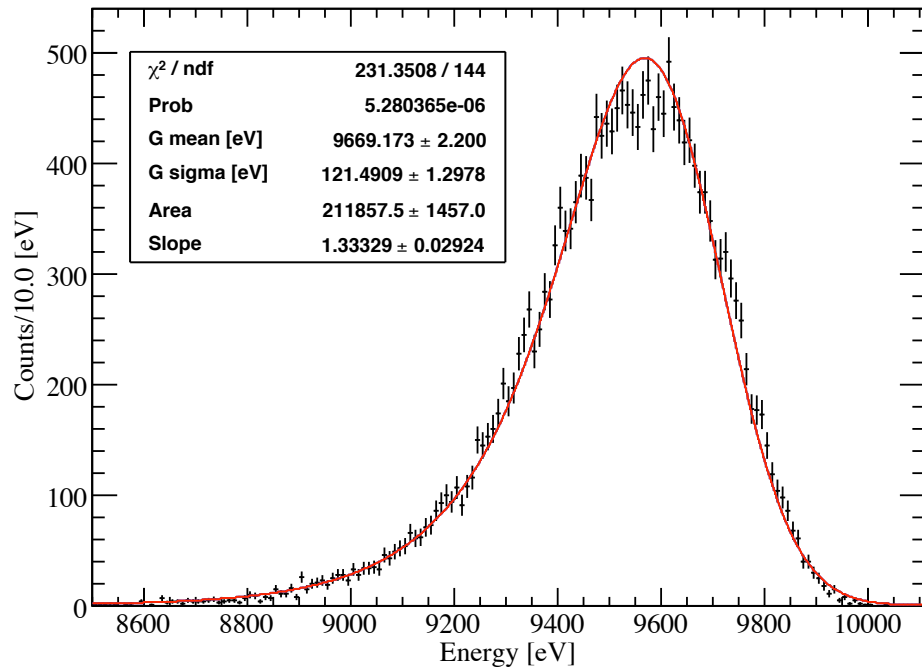
mean = 8723.9 ± 0.3

gamma = 20.0 ± 0.4

KHeX L gamma (9768.0 eV) fit

1st cycle

Compton fit



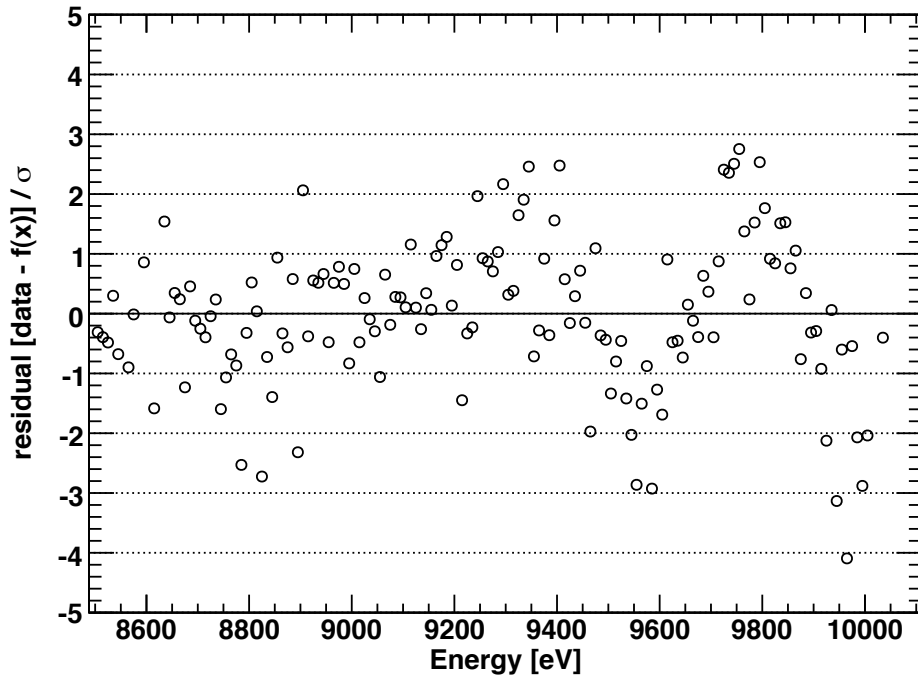
1st cycle KHeX Lg (9768 eV)

only Compton tail

Bin-width : 10 eV

Fit region : 8500-10100 eV

fit residual



Chisqr/NDF = 231.3/144

1st cycle KHeX Lg (9768 eV)

Simulation

[KHeX L-gamma (9768eV) 1st cycle]

Number of Events

Total = 136766 +- 369.819

Normal = 107849

Compton = 21451 +- 146.462

Rayleigh = 6941

Compton other + escaped Rayleigh = 525

Ratios

Compton/Total = 0.156845 +- 0.00115182

Compton/(Normal+Rayleigh) = 0.186872 +- 0.00139002

only Compton tail

number of Compton event

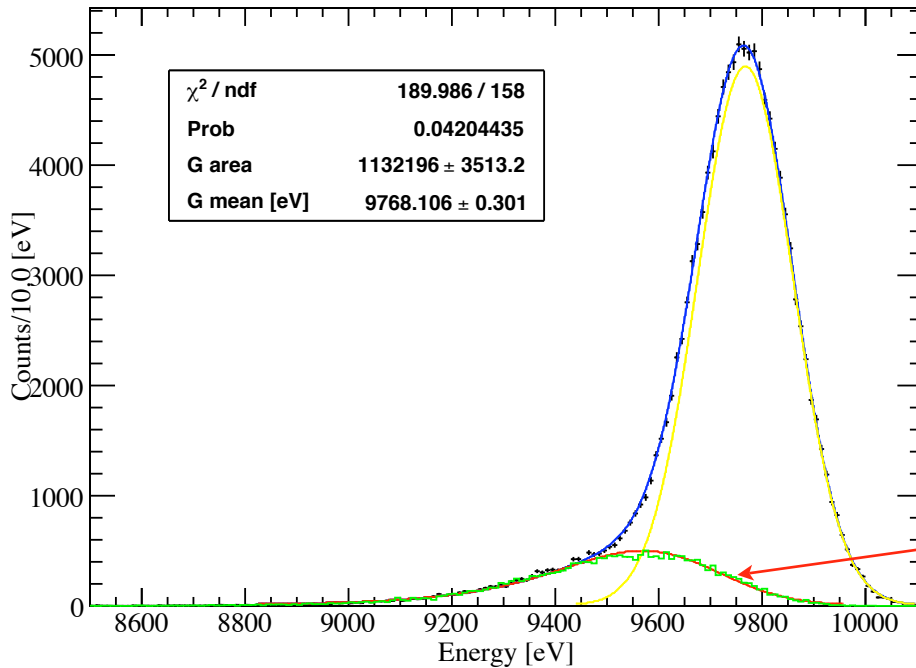
÷10 : area of the fit function

FCN=231.351 FROM MINOS STATUS=SUCCESSFUL 144 CALLS 231 TOTAL
EDM=2.32278e-16 STRATEGY= 1 ERROR MATRIX

ACCURATE

NO.	EXT PARAMETER NAME	VALUE	PARABOLIC ERROR	MINOS ERRORS	
				NEGATIVE	POSITIVE
1	G mean [eV]	9.66917e+03	2.20189e+00	-2.20775e+00	2.19267e+00
2	G sigma [eV]	1.21491e+02	1.29888e+00	-1.29806e+00	1.29751e+00
3	Area	2.11857e+05	1.45697e+03	-1.45697e+03	1.45697e+03
4	Slope	1.33329e+00	2.92671e-02	-2.90548e-02	2.94333e-02

Total fit (Gauss)



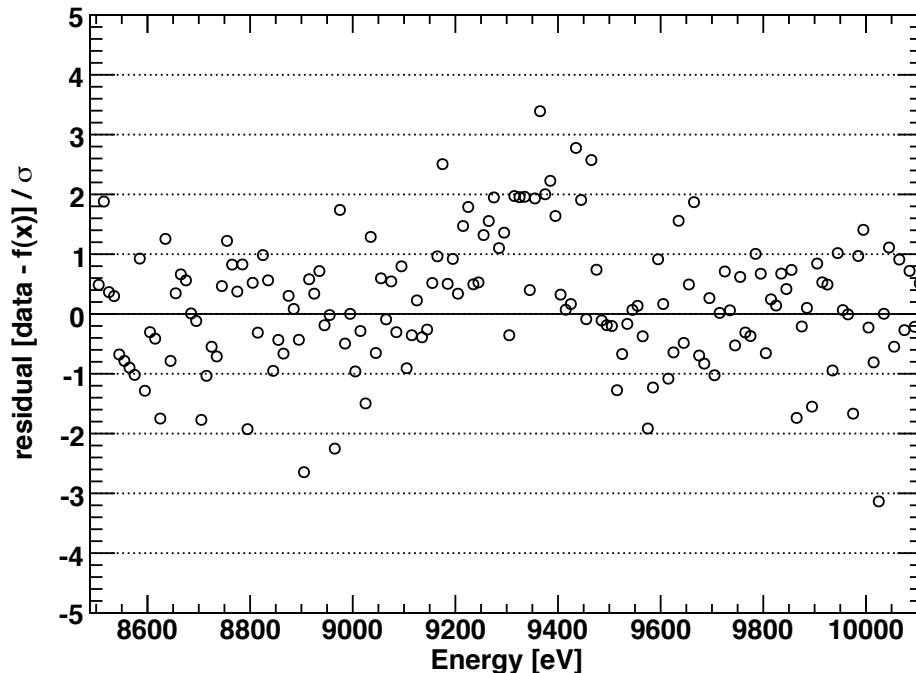
1st cycle KHeX Lg (9768 eV)

$\Gamma=0$ eV : pure Gaussian

Total fit with fixed Compton tail

Tail parameters were fixed

fit residual



Bin-width : 10 eV

Fit region : 8500-10100 eV

Chisqr/NDF = 190.0/158

main Gauss mean = 9768.1 ± 0.3

Simulation

[KHeX L-gamma (9768eV) 1st cycle]

Number of Events

Total = 136766 +- 369.819

Normal = 107849

Compton = 21451 +- 146.462

Rayleigh = 6941

Compton other + escaped Rayleigh = 525

Ratios

Compton/Total = 0.156845 +- 0.00115182

Compton/(Normal+Rayleigh) = 0.186872 +- 0.00139002

1st cycle KHeX Lg (9768 eV)

$\Gamma=0$ eV : pure Gaussian

Total fit with fixed Compton tail

Compton area = 21185.7

(Normal+Ray) area = 113220

Ratio

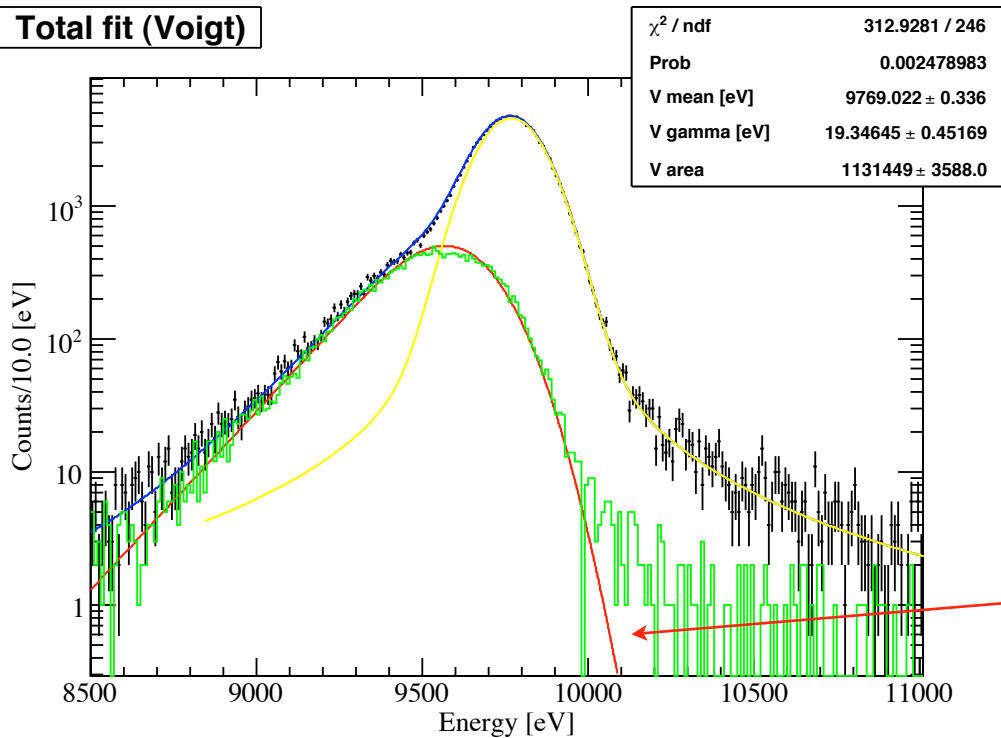
Compton/(Normal+Ray) = 0.187121

FCN=189.986 FROM MINOS STATUS=SUCCESSFUL 24 CALLS 64 TOTAL
EDM=3.92843e-08 STRATEGY= 1 ERROR MATRIX

ACCURATE

EXT	PARAMETER		PARABOLIC	MINOS ERRORS	
NO.	NAME	VALUE	ERROR	NEGATIVE	POSITIVE
1	g mean [eV]	9.66917e+03	fixed		
2	g sigma [eV]	1.21491e+02	fixed		
3	t area	2.11857e+05	fixed		
4	t slope	1.33329e+00	fixed		
5	G area	1.13220e+06	3.51322e+03	-3.51367e+03	3.51275e+03
6	G mean [eV]	9.76811e+03	3.01201e-01	-3.01240e-01	3.01163e-01
7	G sigma [eV]	9.24265e+01	fixed		

Total fit (Voigt)



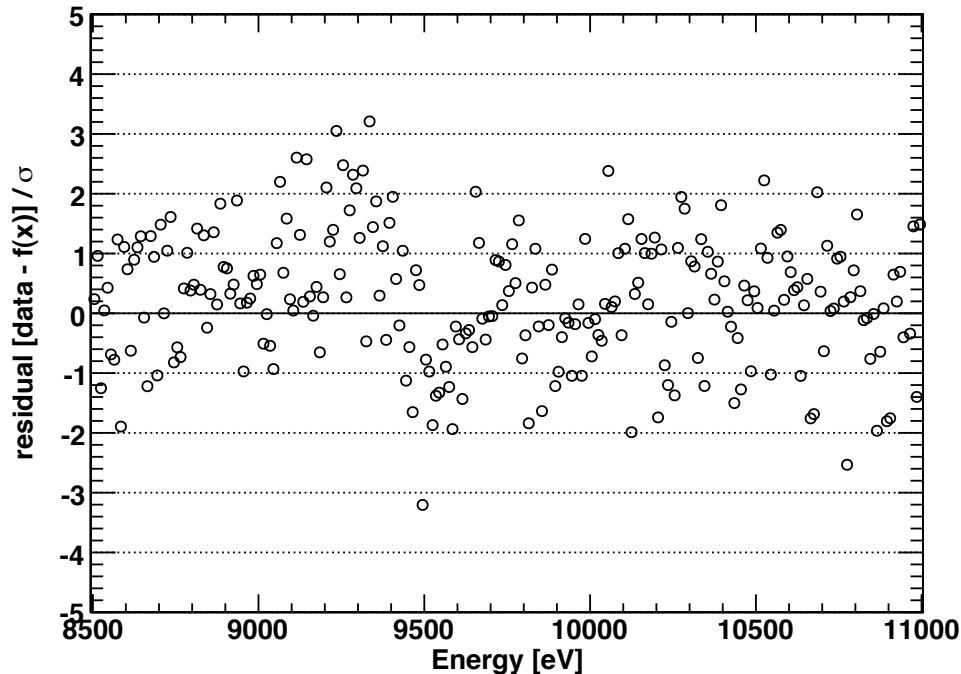
1st cycle KHeX Lg (9768 eV)

$\Gamma=20$ eV : Voigt profile

Total fit with fixed Compton tail

Tail parameters were fixed from the **Gauss*Exp convolution (Not Voigt)**

fit residual



Bin-width : 10 eV

Fit region : 8500-11000 eV

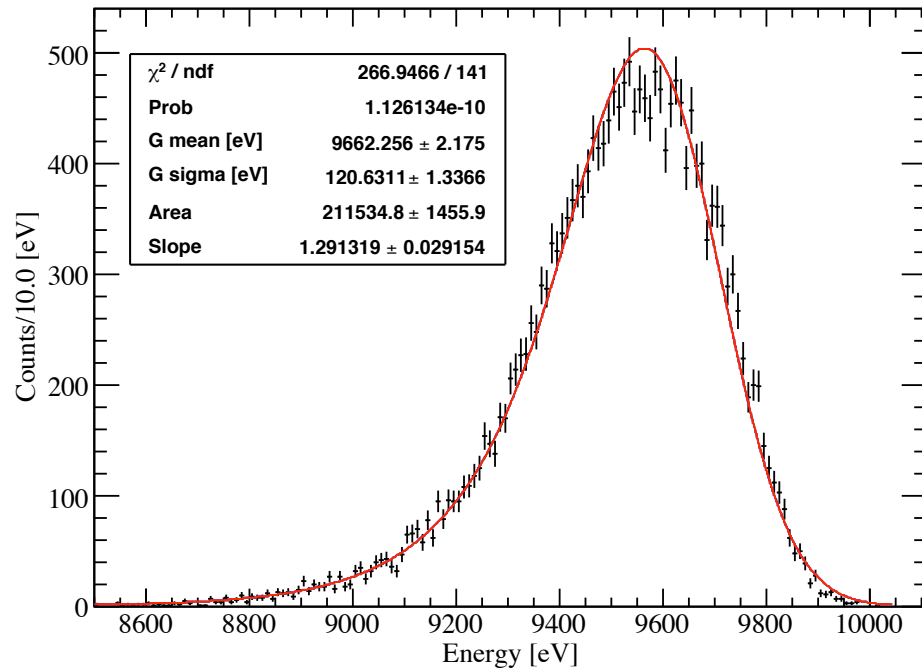
mean = 9769.0±0.3

gamma = 19.3±0.5

KHeX L gamma (9768.0 eV) fit

2nd cycle

Compton fit



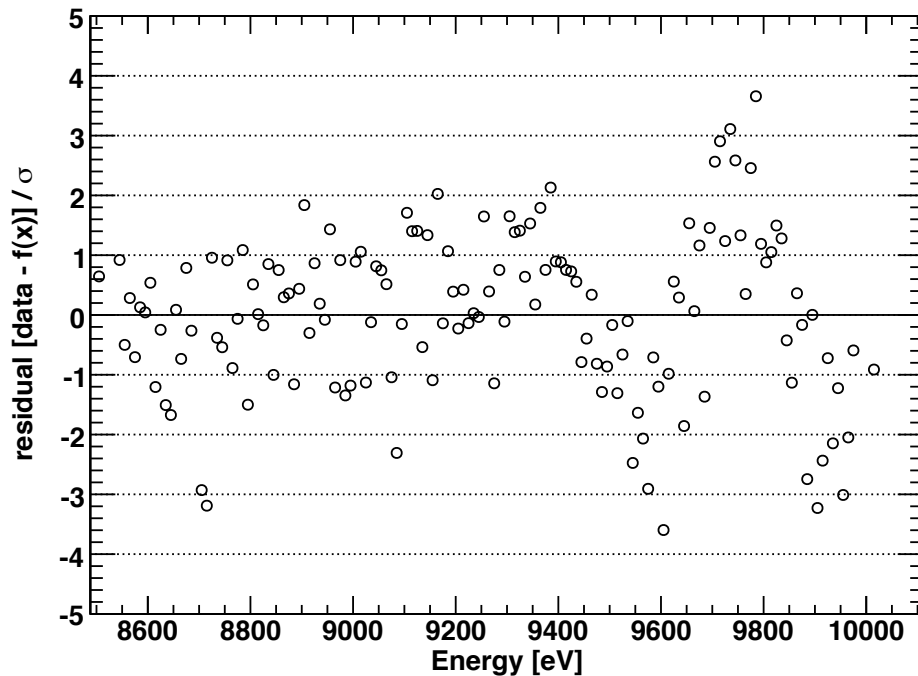
2nd cycle KHeX Lg (9768 eV)

only Compton tail

Bin-width : 10 eV

Fit region : 8500-10100 eV

fit residual



Chisqr/NDF = 266.9/141

2nd cycle KHeX Lg (9768 eV)

Simulation

[KHeX L-gamma (9768eV) 2nd cycle]

Number of Events

Total = 136849 +- 369.931

Normal = 107960

Compton = 21452 +- 146.465

Rayleigh = 6903

Compton other + escaped Rayleigh = 534

Ratios

Compton/Total = 0.156757 +- 0.0011511

Compton/(Normal+Rayleigh) = 0.186762 +- 0.00138911

only Compton tail

number of Compton event

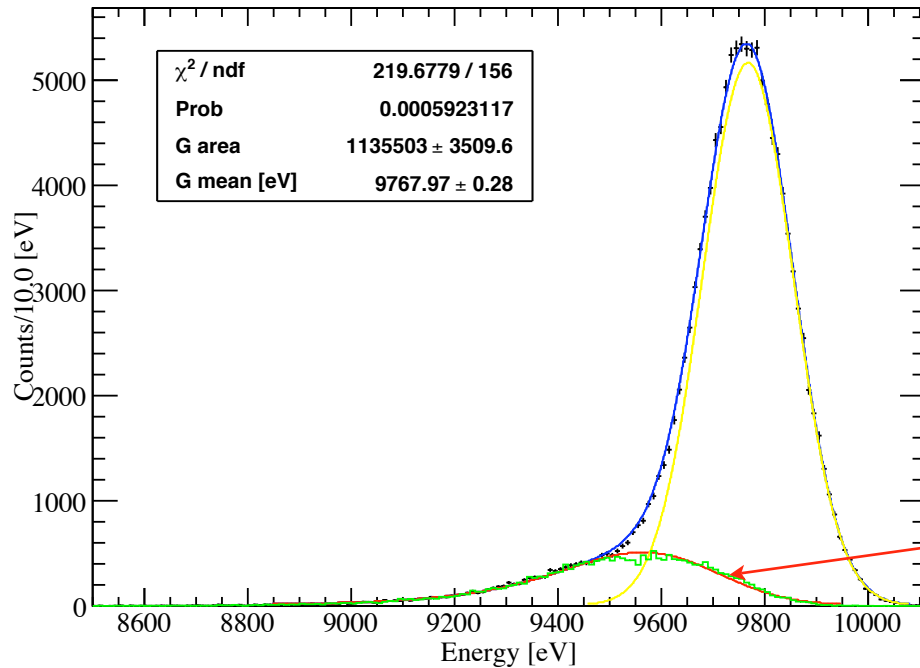
÷10 : area of the fit function

FCN=266.947 FROM MINOS STATUS=SUCCESSFUL 146 CALLS 237 TOTAL
EDM=1.81926e-15 STRATEGY= 1 ERROR MATRIX

ACCURATE

NO.	EXT PARAMETER NAME	VALUE	PARABOLIC ERROR	MINOS ERRORS	
				NEGATIVE	POSITIVE
1	G mean [eV]	9.66226e+03	2.17572e+00	-2.18298e+00	2.16752e+00
2	G sigma [eV]	1.20631e+02	1.33700e+00	-1.33601e+00	1.33729e+00
3	Area	2.11535e+05	1.45588e+03	-1.45589e+03	1.45589e+03
4	Slope	1.29132e+00	2.91594e-02	-2.89718e-02	2.93368e-02

Total fit (Gauss)



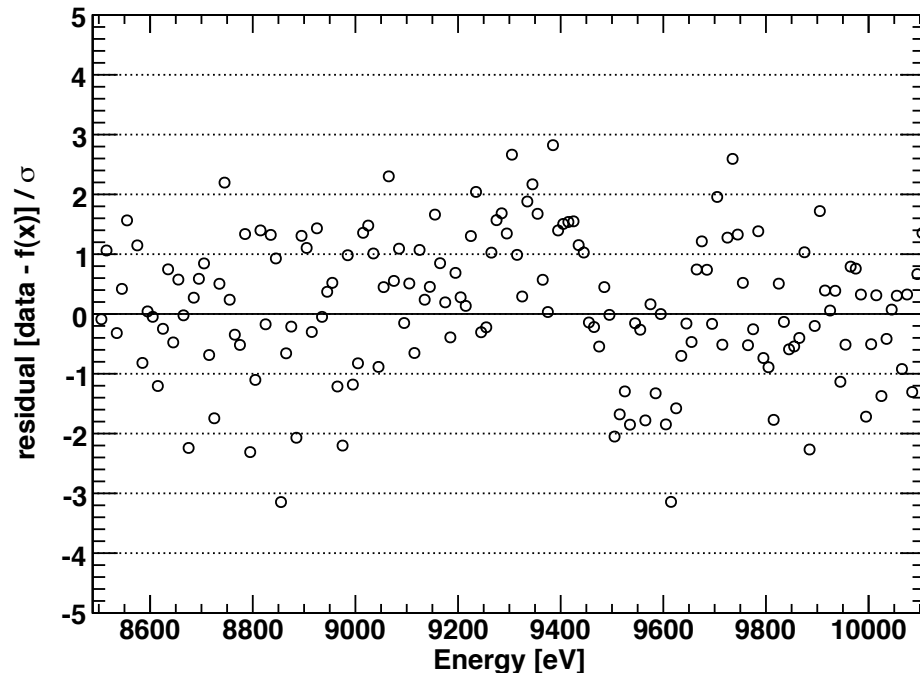
2nd cycle KHeX Lg (9768 eV)

$\Gamma=0$ eV : pure Gaussian

Total fit with fixed Compton tail

Tail parameters were fixed

fit residual



Bin-width : 10 eV

Fit region : 8500-10100 eV

Chisqr/NDF = 219.7/156

main Gauss mean = 9768.0 ± 0.3

Simulation

[KHeX L-gamma (9768eV) 2nd cycle]

Number of Events

Total = 136849 +- 369.931

Normal = 107960

Compton = 21452 +- 146.465

Rayleigh = 6903

Compton other + escaped Rayleigh = 534

Ratios

Compton/Total = 0.156757 +- 0.0011511

Compton/(Normal+Rayleigh) = 0.186762 +- 0.00138911

2nd cycle KHeX Lg (9768 eV)

$\Gamma=0$ eV : pure Gaussian

Total fit with fixed Compton tail

Compton area = 21153.5

(Normal+Ray) area = 113550

Ratio

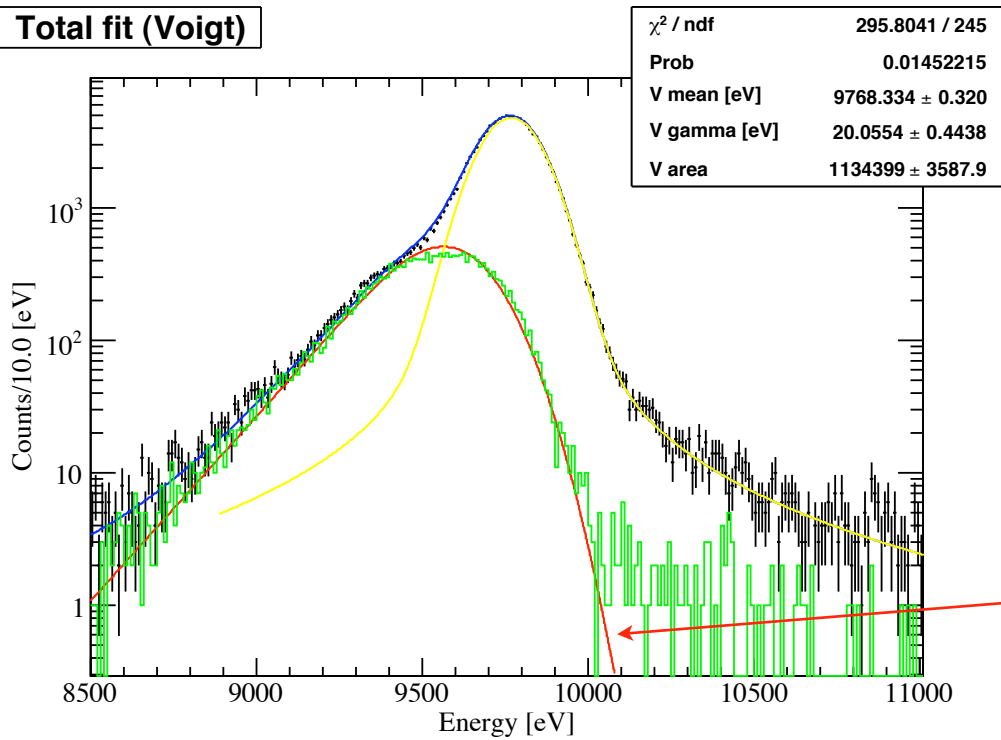
Compton/(Normal+Ray) = 0.186292

FCN=219.678 FROM MINOS STATUS=SUCCESSFUL 24 CALLS 64 TOTAL
EDM=3.33401e-08 STRATEGY= 1 ERROR MATRIX

ACCURATE

EXT	PARAMETER		PARABOLIC	MINOS ERRORS	
NO.	NAME	VALUE	ERROR	NEGATIVE	POSITIVE
1	g mean [eV]	9.66226e+03	fixed		
2	g sigma [eV]	1.20631e+02	fixed		
3	t area	2.11535e+05	fixed		
4	t slope	1.29132e+00	fixed		
5	G area	1.13550e+06	3.50964e+03	-3.51006e+03	3.50922e+03
6	G mean [eV]	9.76797e+03	2.82813e-01	-2.82844e-01	2.82782e-01
7	G sigma [eV]	8.78452e+01	fixed		

Total fit (Voigt)



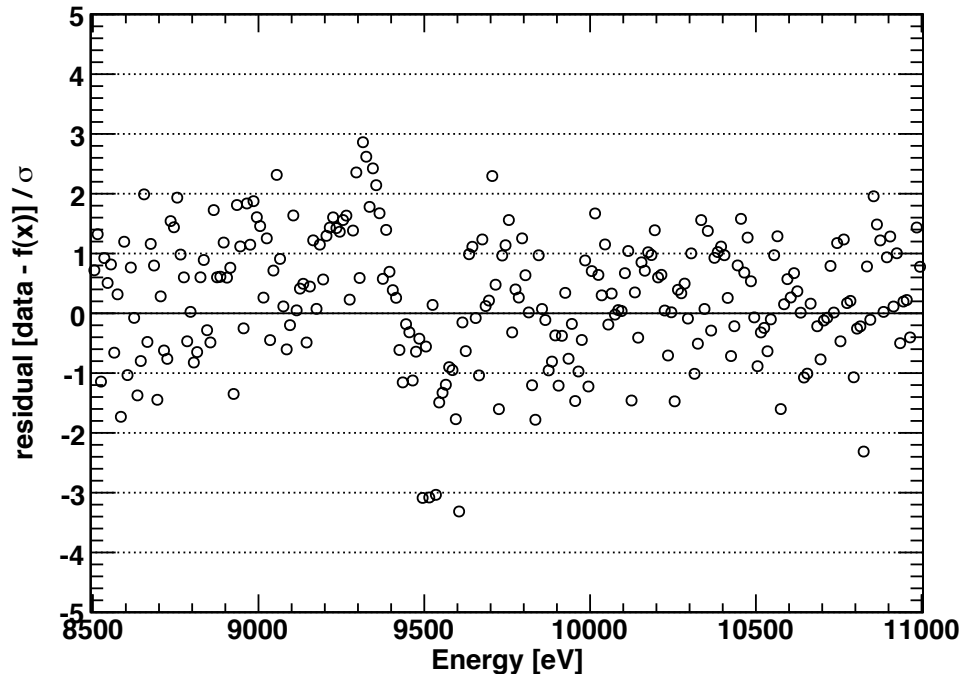
2nd cycle KHeX Lg (9768 eV)

$\Gamma=20$ eV : Voigt profile

Total fit with fixed Compton tail

Tail parameters were fixed from the **Gauss*Exp convolution (Not Voigt)**

fit residual



Bin-width : 10 eV

Fit region : 8500-11000 eV

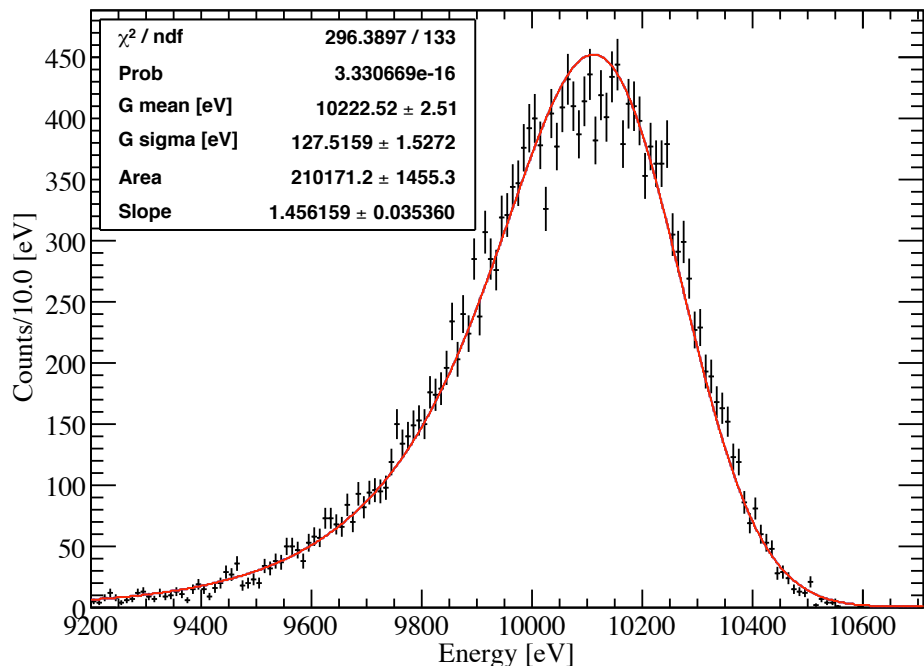
mean = 9768.3 ± 0.3

gamma = 20.1 ± 0.5

KHeX L delta (10331.0 eV) fit

1st cycle

Compton fit



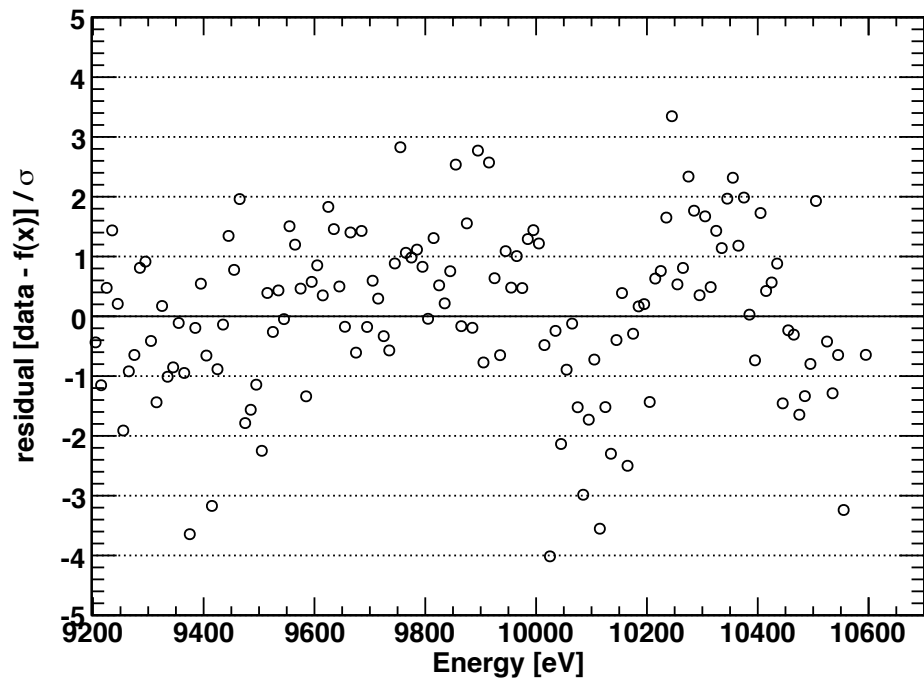
1st cycle KHeX Ld (10331 eV)

only Compton tail

Bin-width : 10 eV

Fit region : 9200-10700 eV

fit residual



Chisqr/NDF = 296.4/133

1st cycle KHeX Ld (10331 eV)

Simulation

[KHeX L-delta (10331 eV) 1st cycle]

Number of Events

Total = 133502 +/- 365.379

Normal = 105465

Compton = 21335 +/- 146.065

Rayleigh = 6185

Compton other + escaped Rayleigh = 517

Ratios

Compton/Total = 0.15981 +/- 0.00117829

Compton/(Normal+Rayleigh) = 0.191088 +/- 0.00142777

only Compton tail

number of Compton event

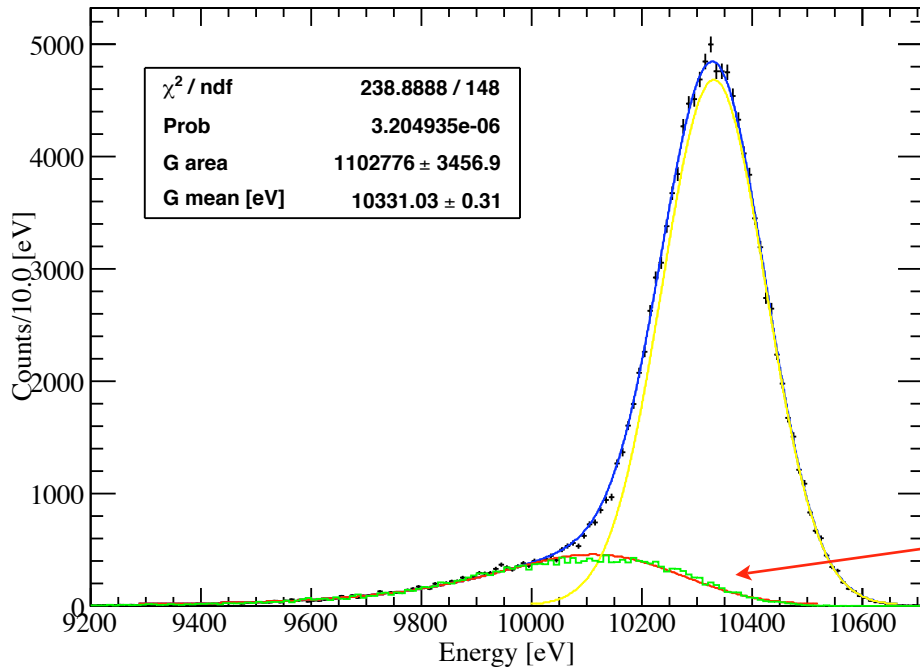
÷10 : area of the fit function

FCN=296.39 FROM MINOS STATUS=SUCCESSFUL 146 CALLS 237 TOTAL
EDM=5.12475e-17 STRATEGY= 1 ERROR MATRIX

ACCURATE

NO.	EXT PARAMETER NAME	VALUE	PARABOLIC ERROR	MINOS ERRORS	
				NEGATIVE	POSITIVE
1	G mean [eV]	1.02225e+04	2.51768e+00	-2.52298e+00	2.50540e+00
2	G sigma [eV]	1.27516e+02	1.52884e+00	-1.52704e+00	1.52738e+00
3	Area	2.10171e+05	1.45526e+03	-1.45526e+03	1.45527e+03
4	Slope	1.45616e+00	3.54039e-02	-3.50445e-02	3.56761e-02

Total fit (Gauss)



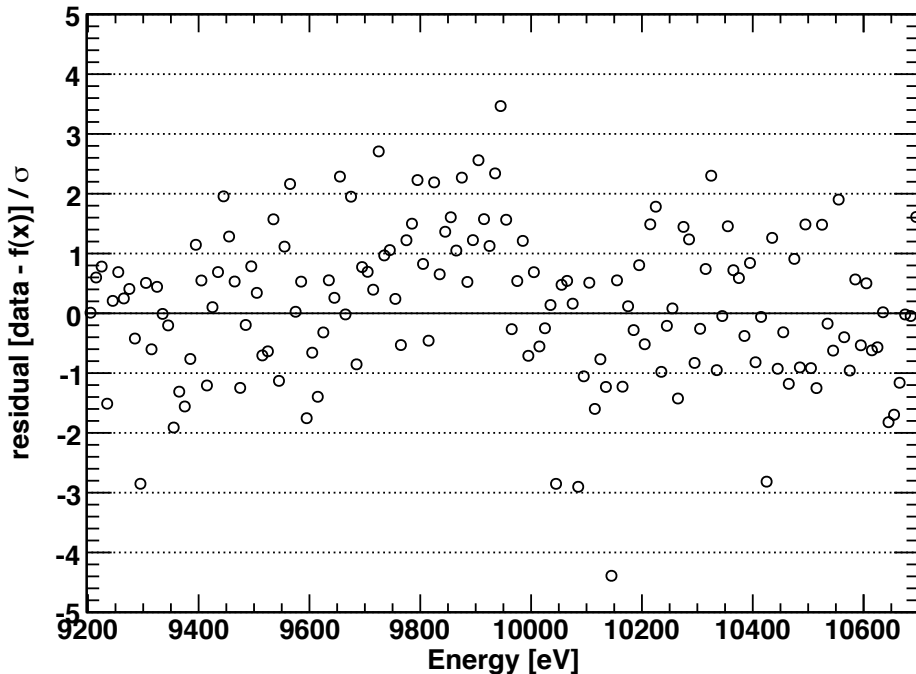
1st cycle KHeX Ld (10331 eV)

$\Gamma=0$ eV : pure Gaussian

Total fit with fixed Compton tail

Tail parameters were fixed

fit residual



Bin-width : 10 eV

Fit region : 9200-10700 eV

Chisqr/NDF = 238.9/148

main Gauss mean = 10331.0 \pm 0.3

Simulation

[KHeX L-delta (10331eV) 1st cycle]

Number of Events

Total = 133502 +- 365.379

Normal = 105465

Compton = 21335 +- 146.065

Rayleigh = 6185

Compton other + escaped Rayleigh = 517

Ratios

Compton/Total = 0.15981 +- 0.00117829

Compton/(Normal+Rayleigh) = 0.191088 +- 0.00142777

1st cycle KHeX Ld (10331 eV)

$\Gamma=0$ eV : pure Gaussian

Total fit with fixed Compton tail

Compton area = 21017.1

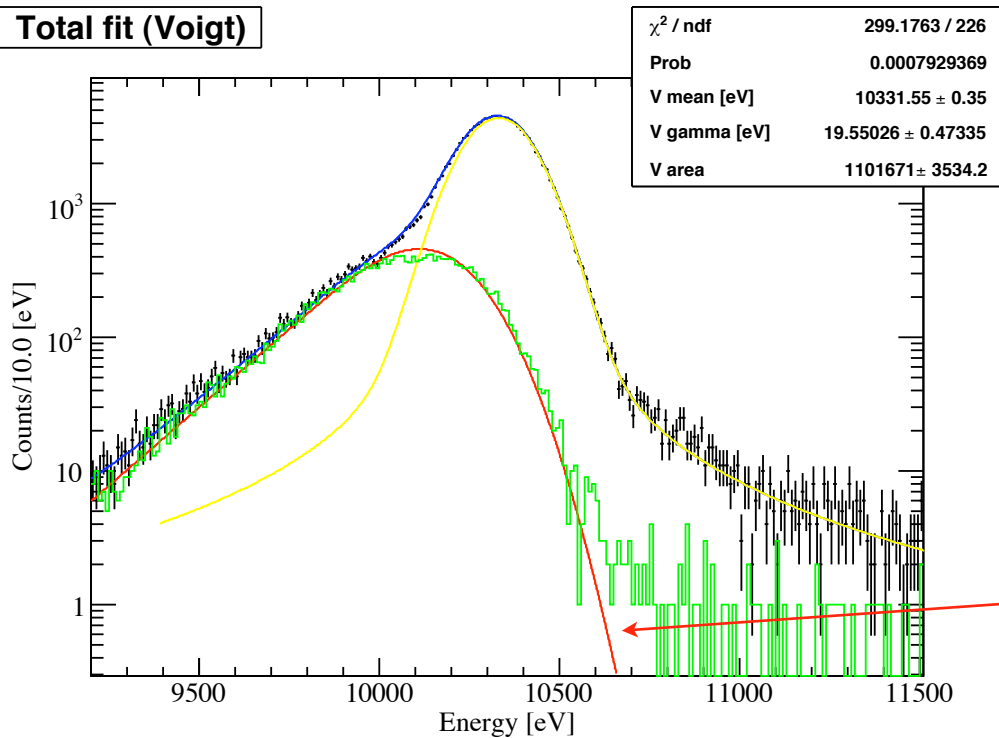
(Normal+Ray) area = 110278

Ratio

Compton/(Normal+Ray) = 0.190584

```
FCN=238.889 FROM MINOS      STATUS=SUCCESSFUL      24 CALLS      65 TOTAL
                        EDM=2.5045e-08      STRATEGY= 1      ERROR MATRIX ACCURATE
EXT  PARAMETER
NO.  NAME      VALUE      PARABOLIC      MINOS ERRORS
      NAME      VALUE      ERROR      NEGATIVE      POSITIVE
  1  g mean [eV]  1.02225e+04  fixed
  2  g sigma [eV]  1.27516e+02  fixed
  3  t area      2.10171e+05  fixed
  4  t slope     1.45616e+00  fixed
  5  G area      1.10278e+06  3.45688e+03  -3.45724e+03  3.45650e+03
  6  G mean [eV]  1.03310e+04  3.07112e-01  -3.07157e-01  3.07068e-01
  7  G sigma [eV]  9.40941e+01  fixed
```

Total fit (Voigt)



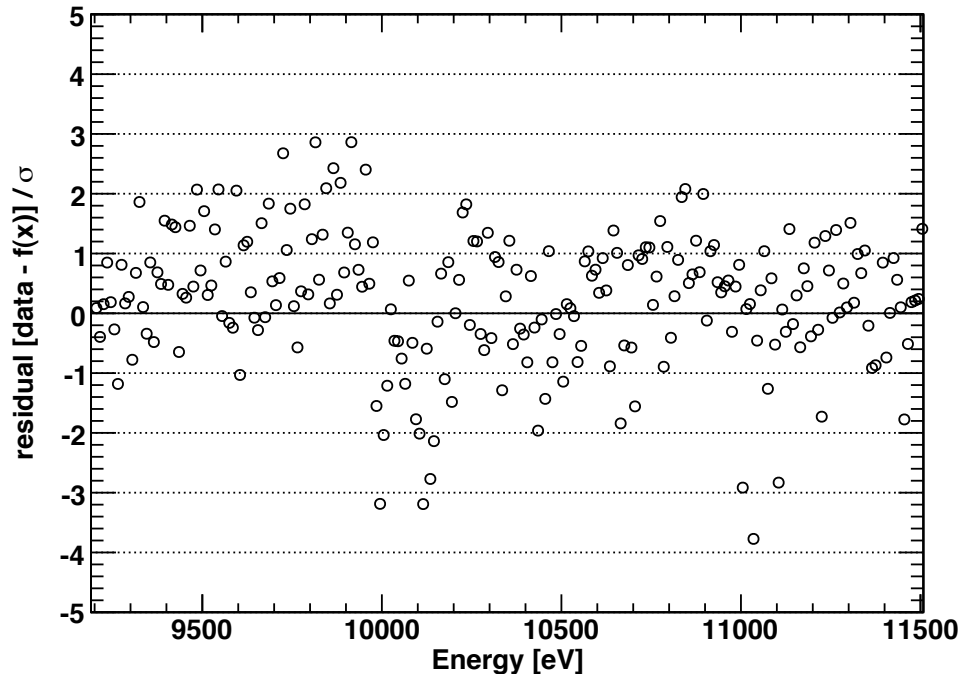
1st cycle KHeX Ld (10331 eV)

$\Gamma=20$ eV : Voigt profile

Total fit with fixed Compton tail

Tail parameters were fixed from the **Gauss*Exp convolution (Not Voigt)**

fit residual



Bin-width : 10 eV

Fit region : 9200-11500 eV

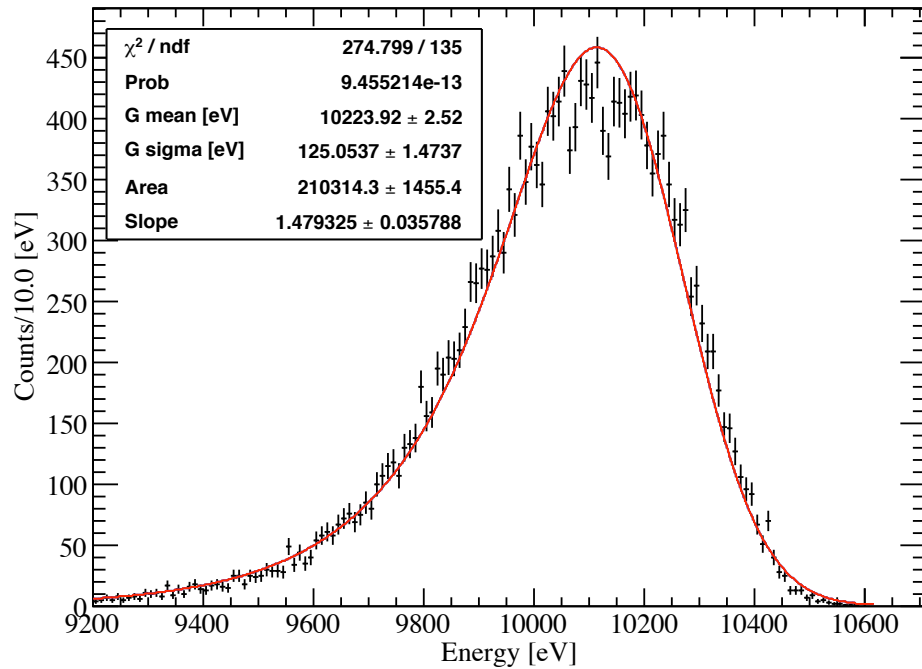
mean = 10331.6 ± 0.4

gamma = 19.6 ± 0.5

KHeX L delta (10331.0 eV) fit

2nd cycle

Compton fit



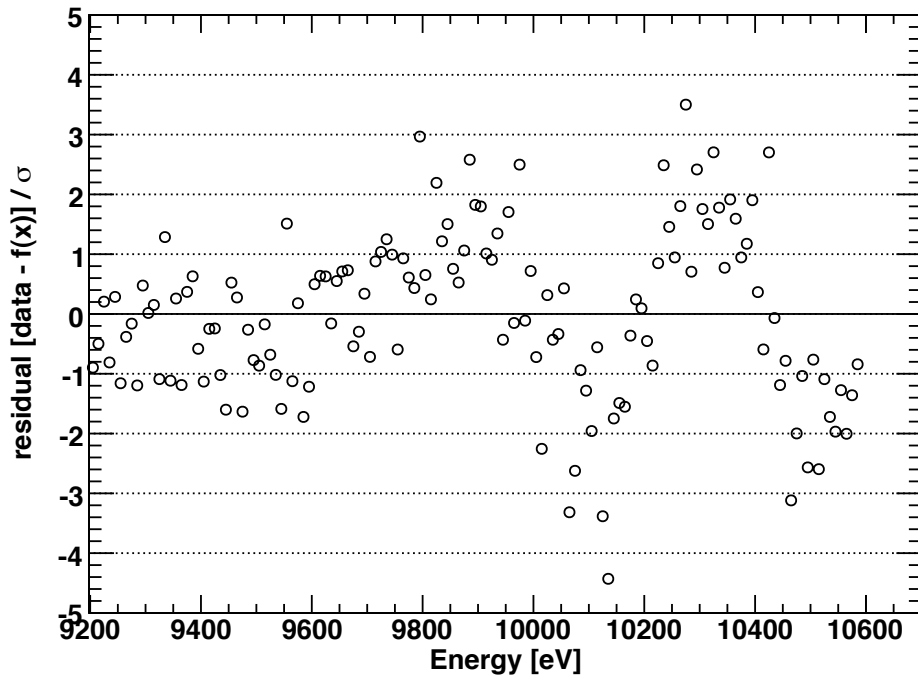
2nd cycle KHeX Ld (10331 eV)

only Compton tail

Bin-width : 10 eV

Fit region : 9200-10700 eV

fit residual



Chisqr/NDF = 274.8/135

2nd cycle KHeX Ld (10331 eV)

Simulation

[KHeX L-delta (10331 eV) 2nd cycle]

Number of Events

Total = 133643 +- 365.572

Normal = 105497

Compton = 21329 +- 146.045

Rayleigh = 6253

Compton other + escaped Rayleigh = 564

Ratios

Compton/Total = 0.159597 +- 0.00117677

Compton/(Normal+Rayleigh) = 0.190864 +- 0.00142616

only Compton tail

number of Compton event

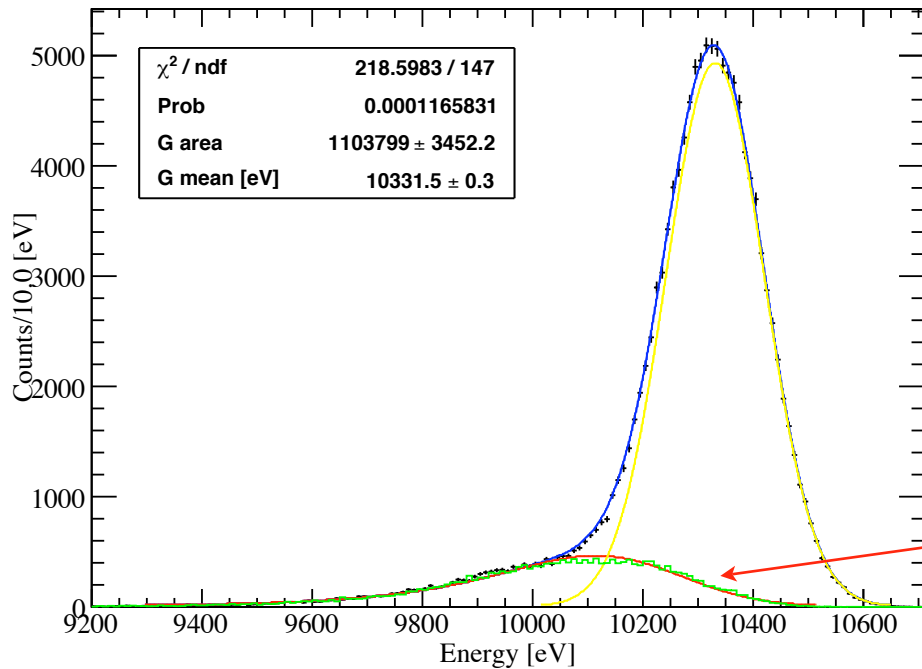
÷10 : area of the fit function

FCN=274.799 FROM MINOS STATUS=SUCCESSFUL 146 CALLS 235 TOTAL
EDM=6.74117e-15 STRATEGY= 1 ERROR MATRIX

ACCURATE

NO.	EXT PARAMETER NAME	VALUE	PARABOLIC ERROR	MINOS ERRORS	
				NEGATIVE	POSITIVE
1	G mean [eV]	1.02239e+04	2.52542e+00	-2.53316e+00	2.51641e+00
2	G sigma [eV]	1.25054e+02	1.47410e+00	-1.47430e+00	1.47312e+00
3	Area	2.10314e+05	1.45534e+03	-1.45535e+03	1.45535e+03
4	Slope	1.47932e+00	3.57937e-02	-3.54622e-02	3.61143e-02

Total fit (Gauss)



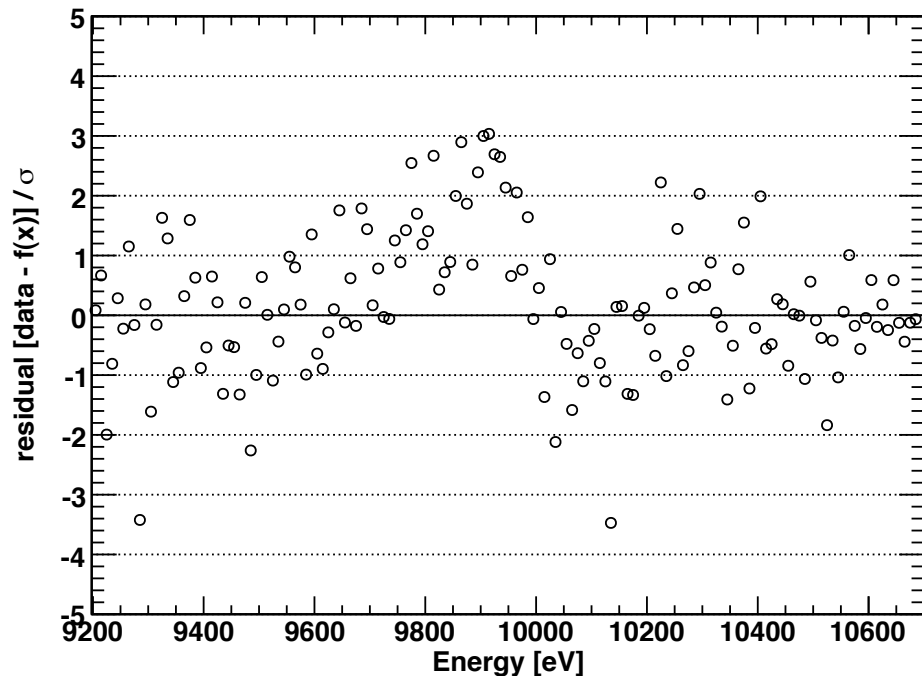
2nd cycle KHeX Ld (10331 eV)

$\Gamma=0$ eV : pure Gaussian

Total fit with fixed Compton tail

Tail parameters were fixed

fit residual



Bin-width : 10 eV

Fit region : 9200-10700 eV

Chisqr/NDF = 218.6/147

main Gauss mean = 10331.5 ± 0.3

Simulation

[KHeX L-delta (10331 eV) 2nd cycle]

Number of Events

Total = 133643 +- 365.572

Normal = 105497

Compton = 21329 +- 146.045

Rayleigh = 6253

Compton other + escaped Rayleigh = 564

Ratios

Compton/Total = 0.159597 +- 0.00117677

Compton/(Normal+Rayleigh) = 0.190864 +- 0.00142616

2nd cycle KHeX Ld (10331 eV)

$\Gamma=0$ eV : pure Gaussian

Total fit with fixed Compton tail

Compton area = 21031.4
(Normal+Ray) area = 110380

Ratio

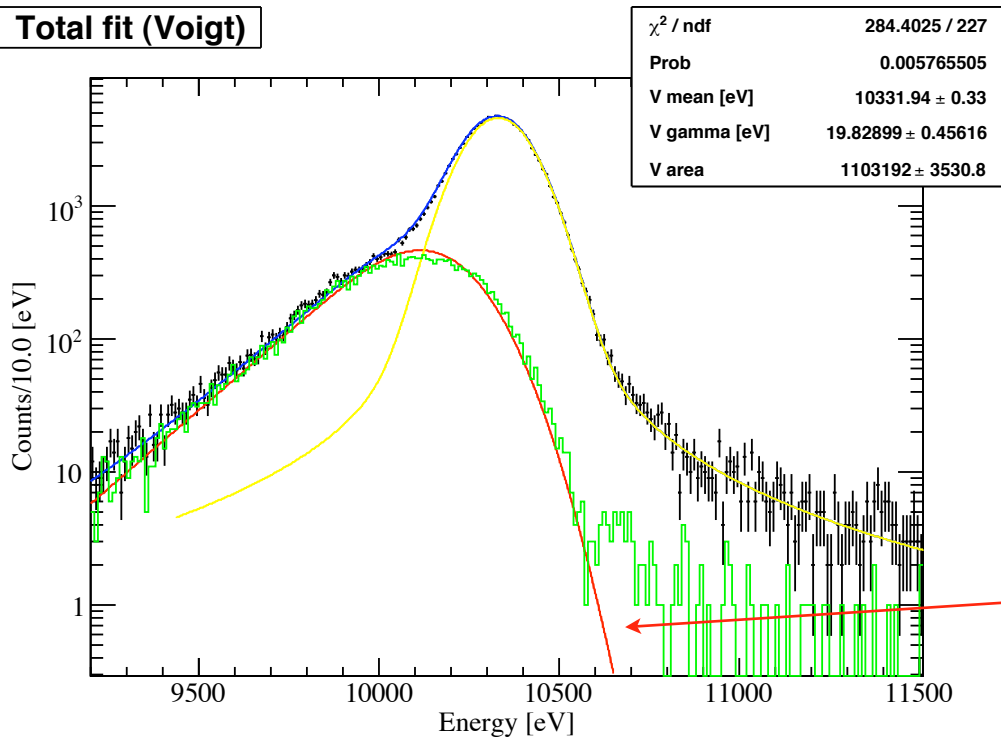
Compton/(Normal+Ray) = 0.190536

FCN=218.598 FROM MINOS STATUS=SUCCESSFUL 24 CALLS 65 TOTAL
EDM=2.71642e-08 STRATEGY= 1 ERROR MATRIX

ACCURATE

EXT	PARAMETER		PARABOLIC	MINOS ERRORS	
NO.	NAME	VALUE	ERROR	NEGATIVE	POSITIVE
1	g mean [eV]	1.02239e+04	fixed		
2	g sigma [eV]	1.25054e+02	fixed		
3	t area	2.10314e+05	fixed		
4	t slope	1.47932e+00	fixed		
5	G area	1.10380e+06	3.45225e+03	-3.45263e+03	3.45185e+03
6	G mean [eV]	1.03315e+04	2.91270e-01	-2.91311e-01	2.91229e-01
7	G sigma [eV]	8.93943e+01	fixed		

Total fit (Voigt)



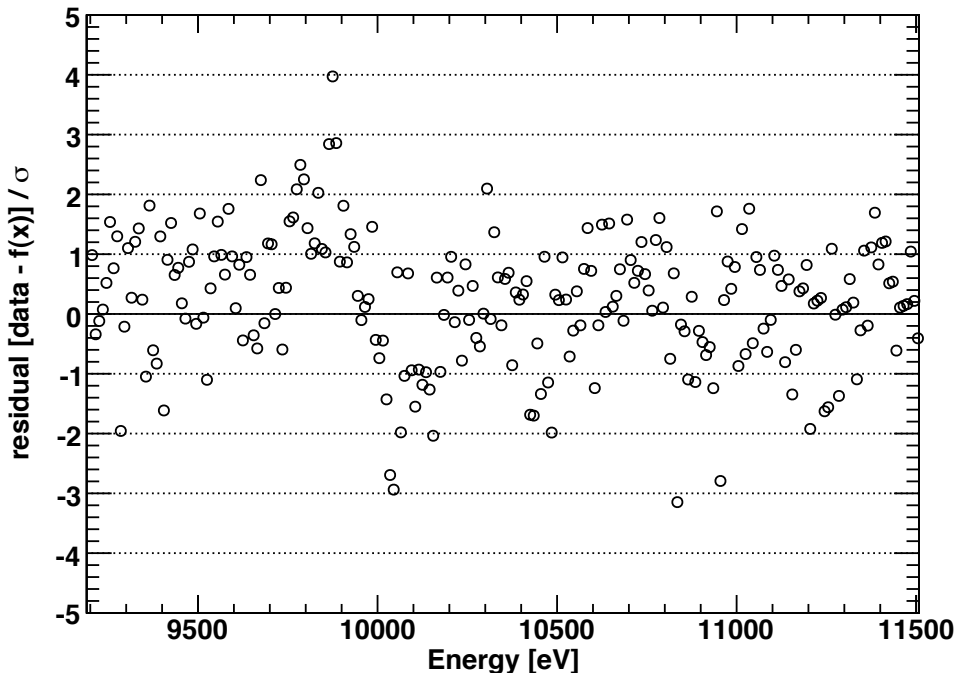
2nd cycle KHeX Ld (10331 eV)

$\Gamma=20$ eV : Voigt profile

Total fit with fixed Compton tail

Tail parameters were fixed from the **Gauss*Exp convolution (Not Voigt)**

fit residual



Bin-width : 10 eV

Fit region : 9200-11500 eV

mean = 10331.9 ± 0.3

gamma = 19.8 ± 0.5