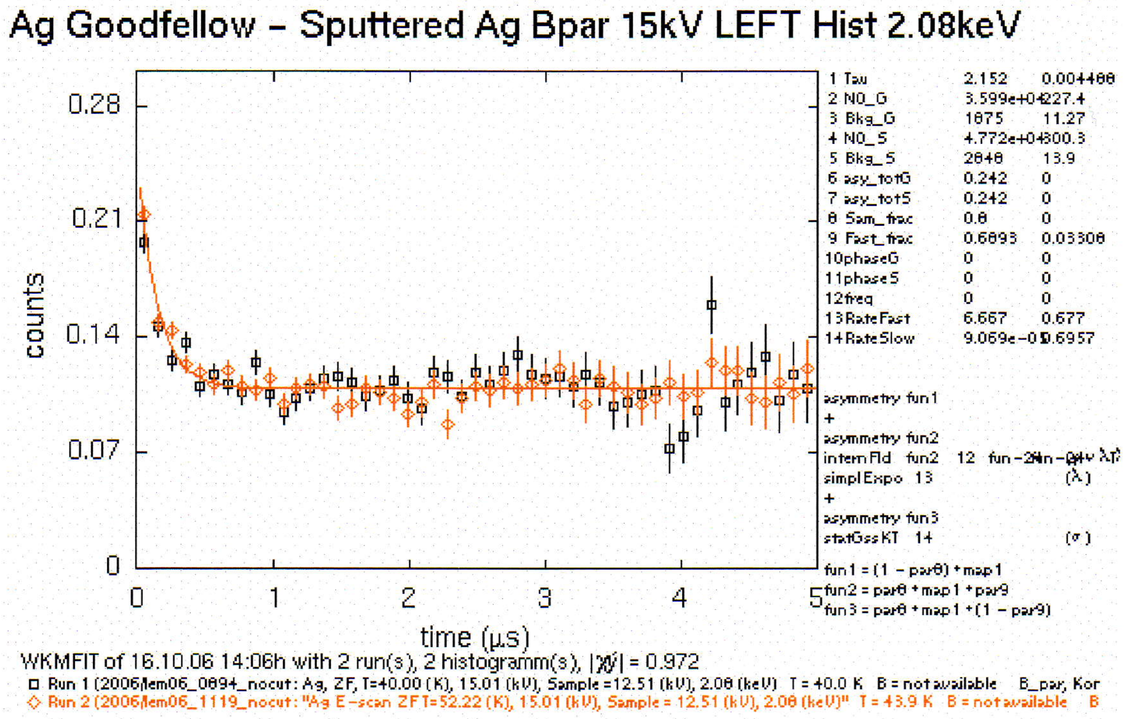
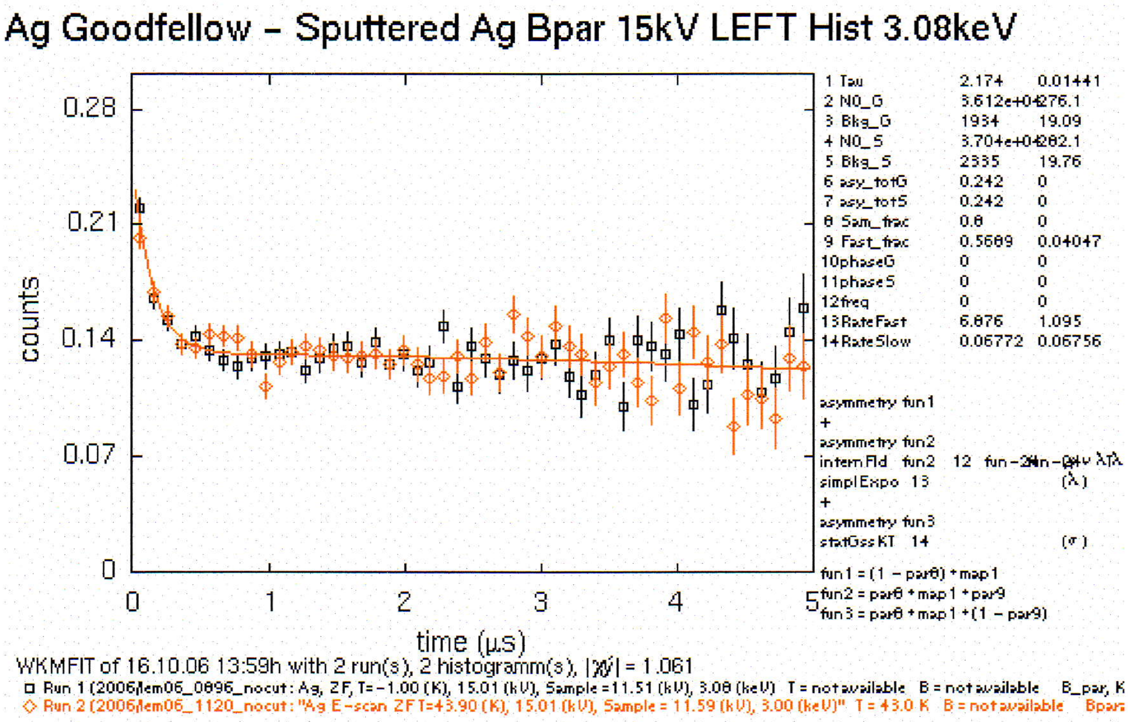
Comparizon of
a) Goodfellow (06/2006) diameter 50mm
and
b) Sputtered Ag (09/2006) 30x30mm
for ZF and B_parallel setup

Conclusion:

Goodfellow and Sputterd Ag show same behaviour in ZF for 2 - 10keV (only this energy range was investigated for both samples.

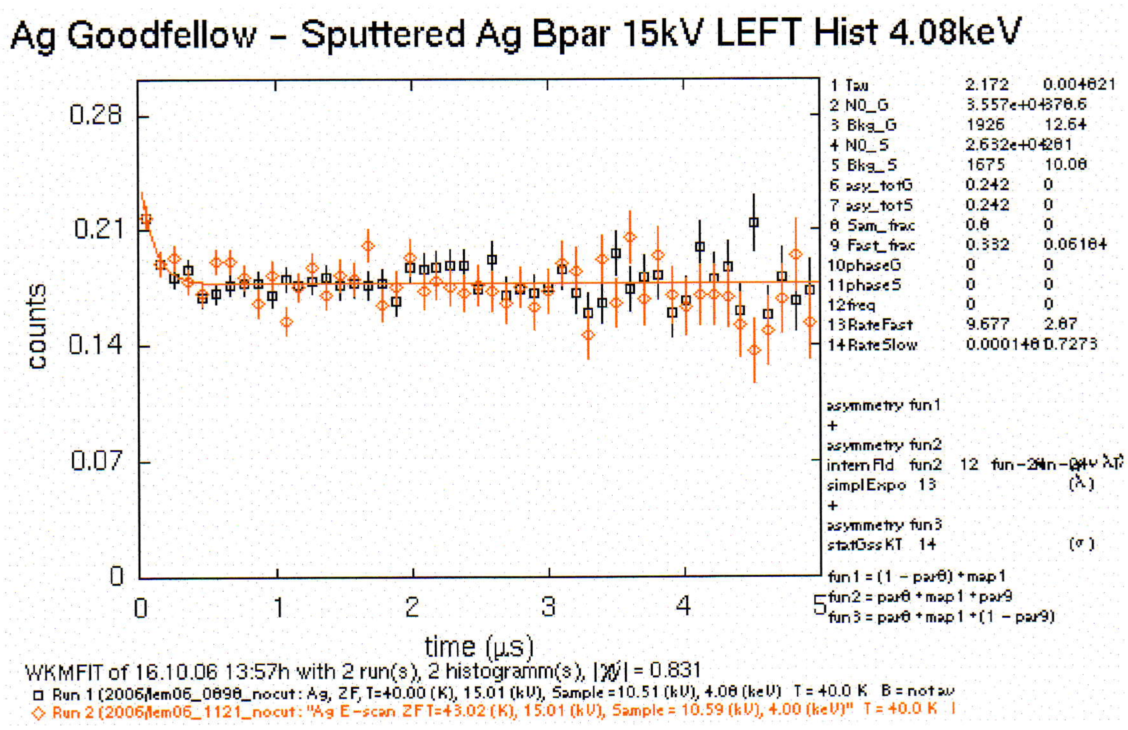
ZF Histogram Fit LEFT



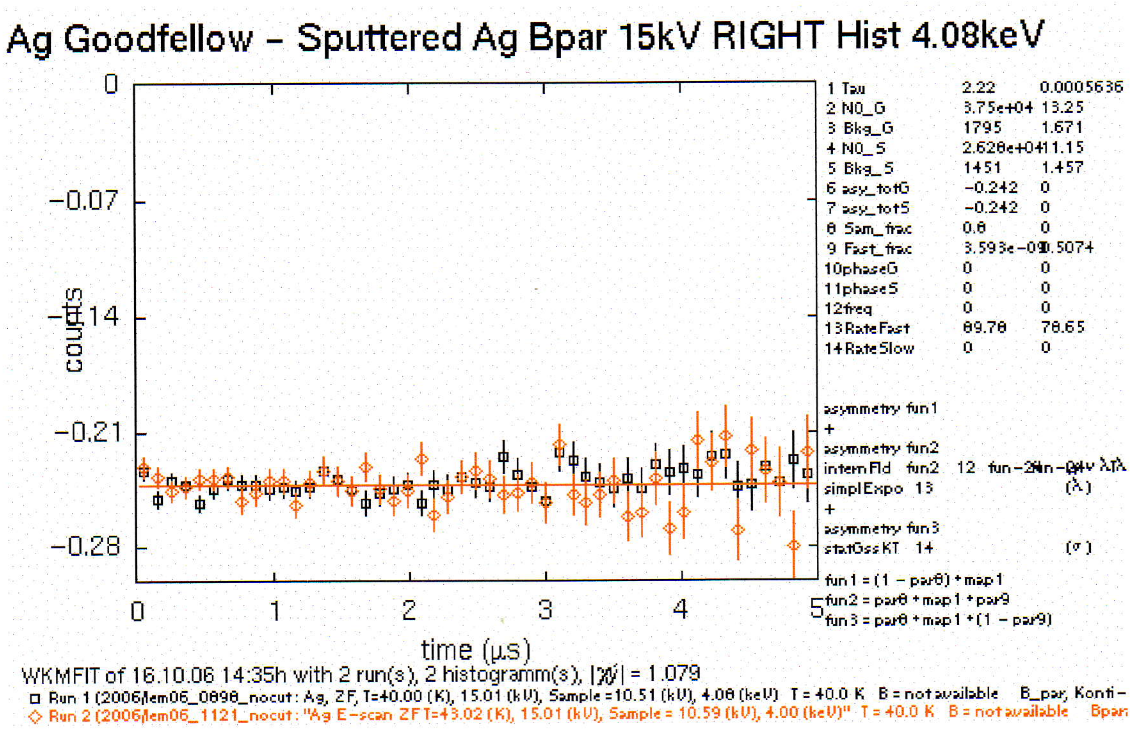


LEFT – RIGHT 4keV ZF

LEFT:

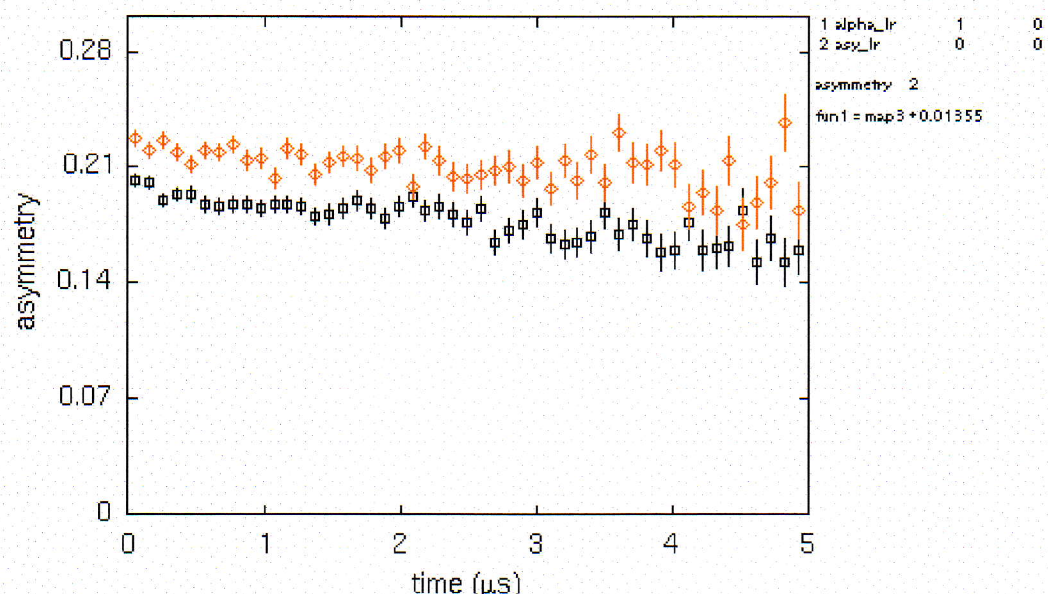


RIGHT:



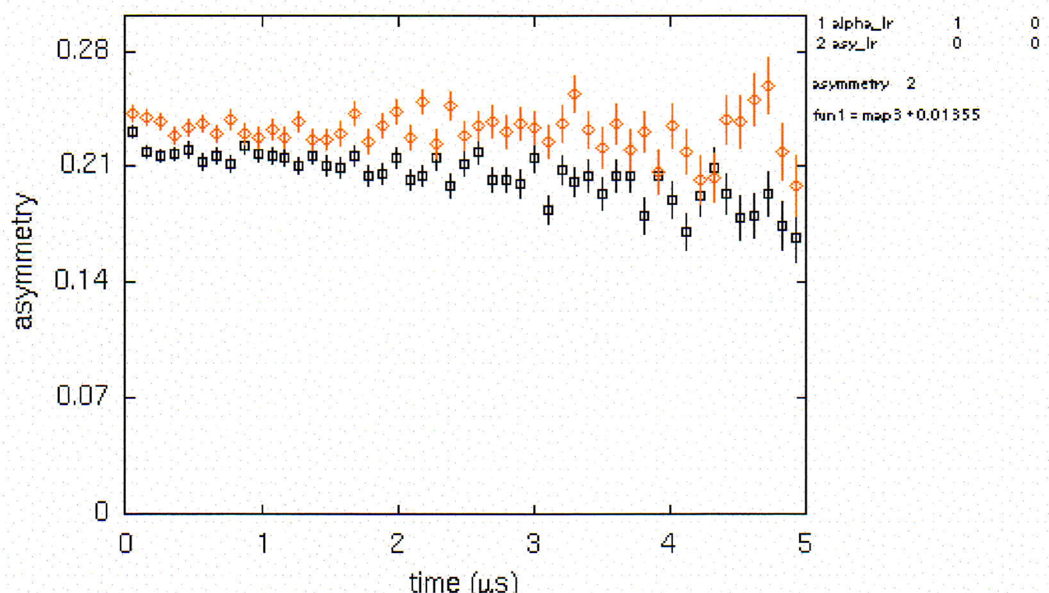
Comparizon ZF Goodfellow-Sputtered ASY Ag

Comparizon GoodFellow-Sputtered Ag, ZF, 40K, 4.08keV



WKMFIT of 27.06.06 08:45h with 2 run(s), 4 histogramm(s), |χ²| = 1.479
□ Run 1 (2006/lem06_0898_nocut: Ag, ZF, T=40.00 (K), 15.01 (kV), Sample =10.51 (kV), 4.08 (keV) T = 40.0 K B = not available B_par, Kor
◇ Run 2 (2006/lem06_1121_nocut: "Ag E-scan ZF T=43.02 (K), 15.01 (kV), Sample = 10.59 (kV), 4.00 (keV)" T = 40.0 K B = not available B

Comparizon GoodFellow-Sputtered Ag, ZF, 40K, 7.58keV



WKMFIT of 27.06.06 08:45h with 2 run(s), 4 histogramm(s), |χ²| = 1.479
□ Run 1 (2006/lem06_0901_nocut: Ag, ZF, T=40.00 (K), 15.01 (kV), Sample =7.01 (kV), 7.58 (keV) T = 40.0 K B = not available B_par, Konti-I;
◇ Run 2 (2006/lem06_1123_nocut: "Ag E-scan ZF T=40.00 (K), 15.01 (kV), Sample = 7.09 (kV), 7.50 (keV)" T = 40.0 K B = not available Bpara

```
1119   Tue Sep 26 2006::01:35:47 --- 04:07:09  1500.7k "Ag E-scan ZF T=52.22 (K), 15.01 (kV), Sample = 12.51 (kV), 2.08 (keV)"
1120   Tue Sep 26 2006::04:09:23 --- 07:03:47  1501.0k "Ag E-scan ZF T=43.90 (K), 15.01 (kV), Sample = 11.59 (kV), 3.00 (keV)"
1121   Tue Sep 26 2006::07:06:01 --- 08:52:35  1501.5k "Ag E-scan ZF T=43.02 (K), 15.01 (kV), Sample = 10.59 (kV), 4.00 (keV)"
1122   Tue Sep 26 2006::08:54:50 --- 10:21:07  1501.4k "Ag E-scan ZF T=40.00 (K), 15.01 (kV), Sample = 9.59 (kV), 5.00 (keV)"
1123   Tue Sep 26 2006::10:23:21 --- 11:56:41  1501.1k "Ag E-scan ZF T=40.00 (K), 15.01 (kV), Sample = 7.09 (kV), 7.50 (keV)"
1124   Tue Sep 26 2006::11:58:55 --- 16:27:02  1429.0k "Ag E-scan ZF T=40.00 (K), 15.01 (kV), Sample = 4.58 (kV), 10.01 (keV)"
1125   Thu Sep 28 2006::17:17:13 --- 07:00:40  9657.0k "Ag E-scan ZF T=40.00 (K), 15.01 (kV), Sample = 12.51 (kV), 2.08 (keV)"
1126   Thu Sep 28 2006::07:03:24 --- 08:05:12  1976.3k Ag test 3 kV energy
1127   Thu Sep 28 2006::08:07:34 --- 08:55:39  1501.7k "Ag E-scan ZF T=40.00 (K), 15.01 (kV), Sample = 10.59 (kV), 4.00 (keV)"
1128   Thu Sep 28 2006::08:57:53 --- 14:36:17  1501.6k "Ag E-scan ZF T=40.00 (K), 15.01 (kV), Sample = 9.59 (kV), 5.00 (keV)"
1129   Thu Sep 28 2006::14:38:31 --- 15:36:14  1003.0k "Ag E-scan ZF T=40.00 (K), 15.01 (kV), Sample = 7.09 (kV), 7.50 (keV)"
1130   Thu Sep 28 2006::15:42:02 --- 16:25:01  1518.4k Ag film, E-scan, ZF now with Brucker OFF, 12.5 kV on sample, E=2 keV
1131   Thu Sep 28 2006::16:37:22 --- 17:05:27  1001.6k "Ag E-scan Bruker=17.5A=100G T=40.00 (K), 15.01 (kV), Sample = 12.51 (kV), 2.08 (keV)"
1132   Thu Sep 28 2006::17:07:41 --- 17:36:16  1001.1k "Ag E-scan Bruker=17.5A=100G T=40.00 (K), 15.01 (kV), Sample = 9.59 (kV), 5.00 (keV)"
1133   Thu Sep 28 2006::17:52:18 --- 18:41:50  1704.6k Ag-E-scan HV-sample = 4.58, E = 10 keV
```

$B_{\parallel}$ } on ey left

$B_{\perp}$

ZF uSR on Goodfellow (06/2006) diameter 50mm

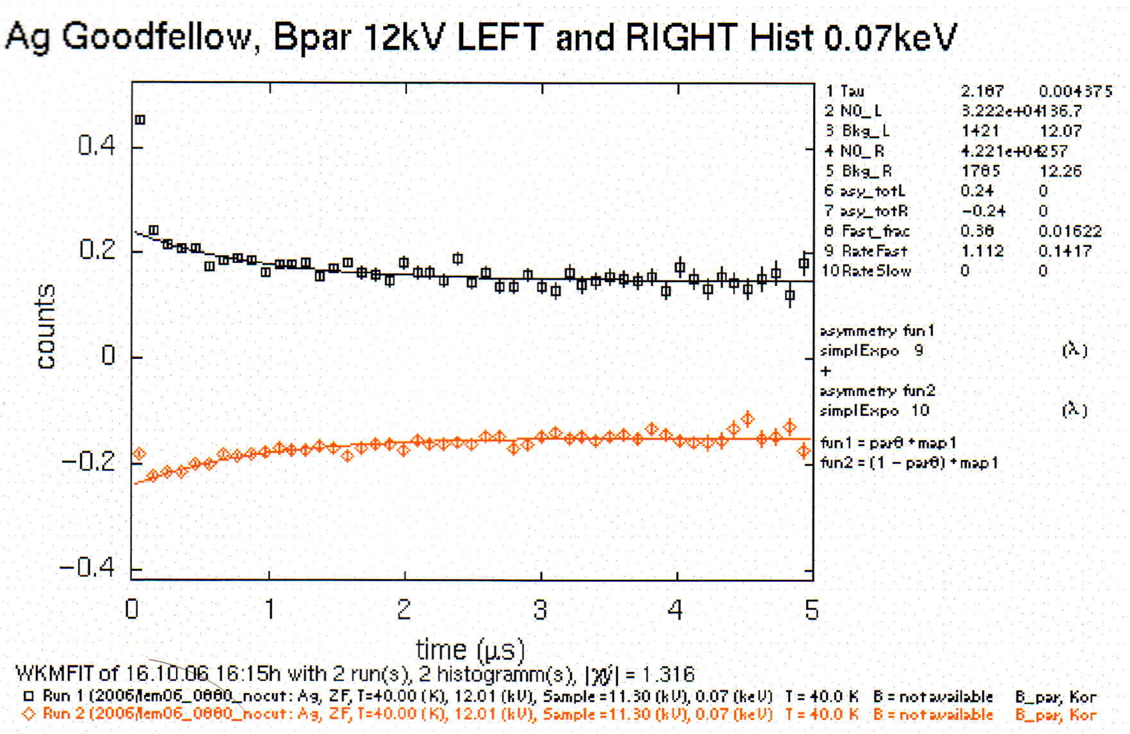
Conclusions:

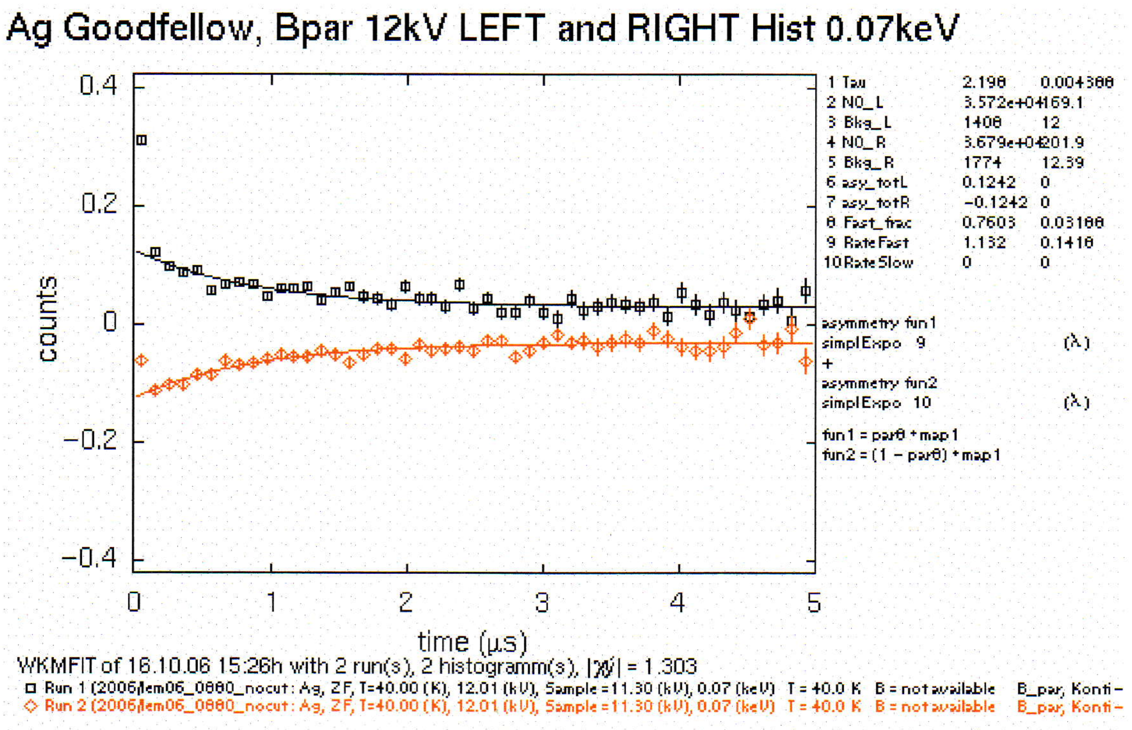
1) At very low energies there are three different types of relaxation in the spectra:
   i) "in-flight effect" in the first 100ns
   ii) moderately damped fraction (1MHZ)
   iii) fraction with zero damping

2) If a component with nearly zero relaxation is present it is not possible to fit single histogram spectra.

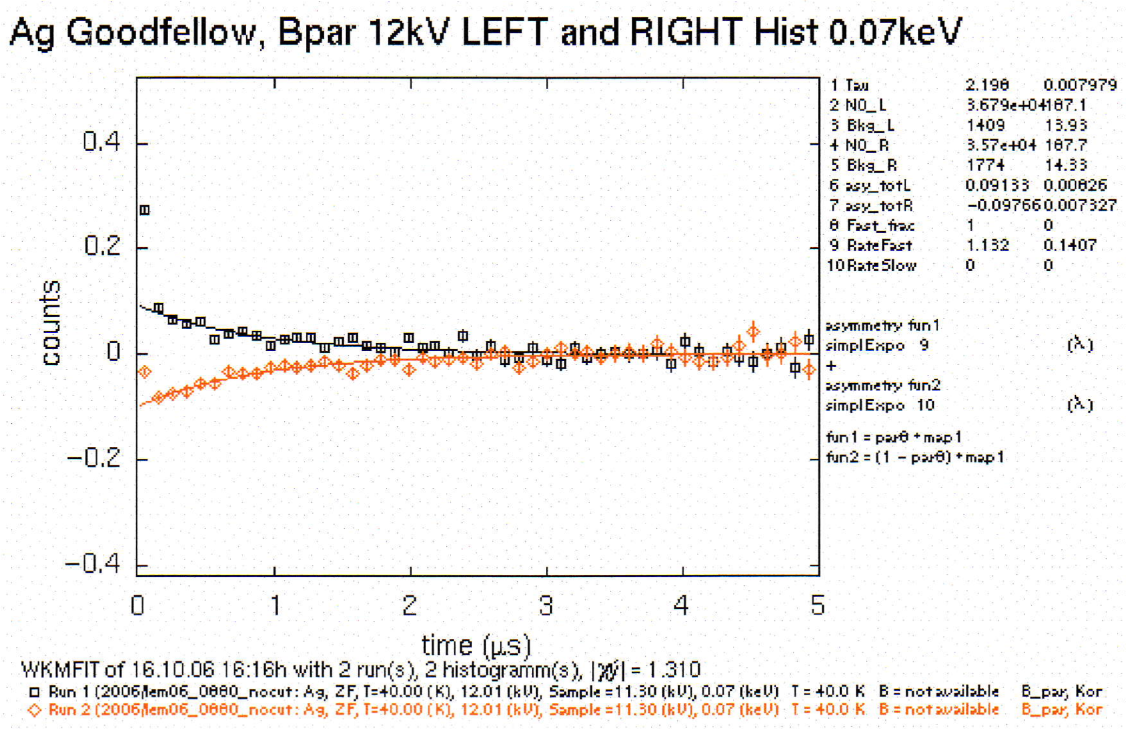
3) Also the ASY spectra are fittable with different models

ZF histogram fits 0.07keV





ZF histogram fits 0.07keV



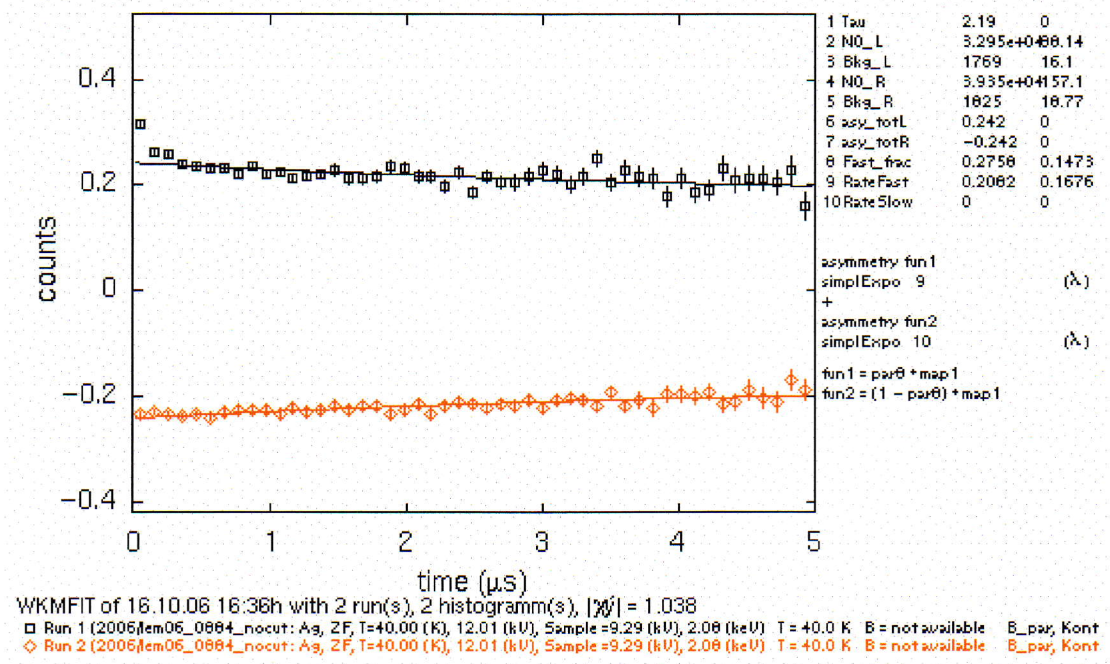
Conclusion:

1) There are three different types of relaxation in the spectra:
   i) “in-flight effect” in the first 100ns
   ii) moderately damped fraction (1MHZ)
   iii) fraction with zero damping

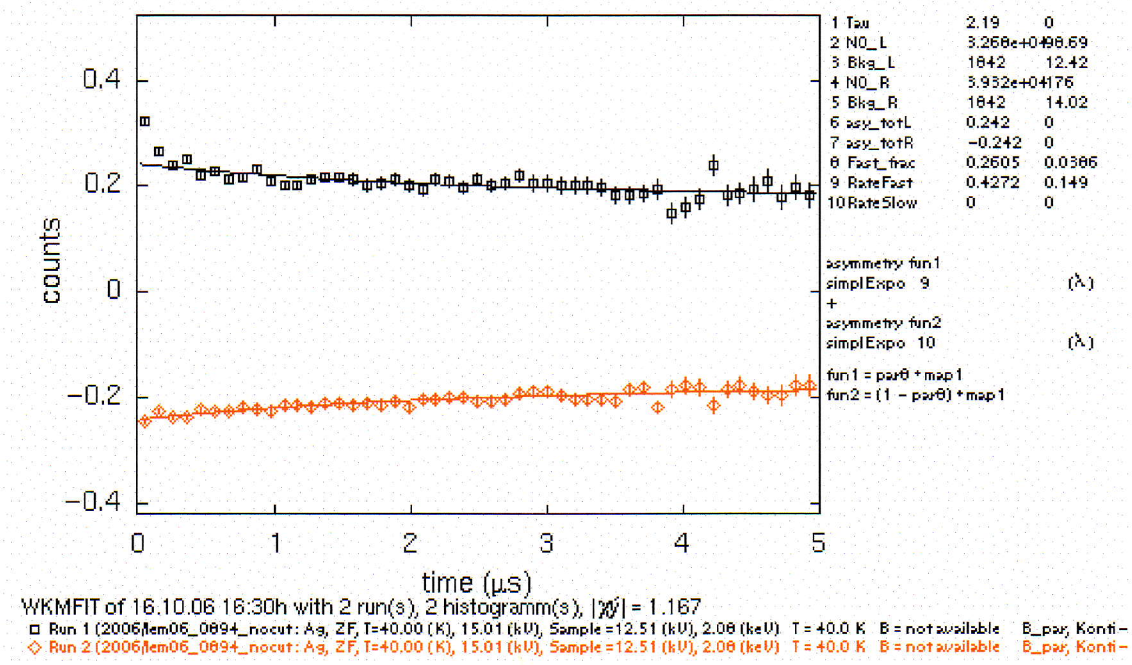
2) If nearly a component with nearly zero relaxation is present it is not possible to fit single histogram spectra.

Comparizon 12kV and 15kV transport

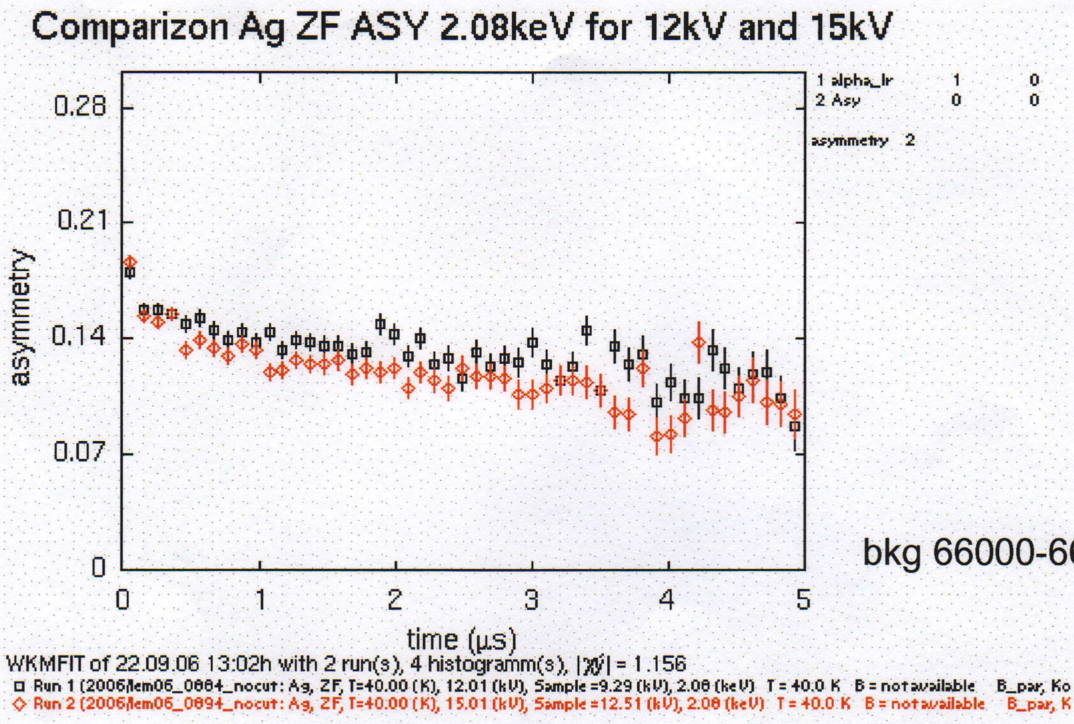
Ag Goodfellow, Bpar 12kV LEFT and RIGHT Hist 2.08keV



Ag Goodfellow, Bpar 15kV LEFT and RIGHT Hist 2.08keV

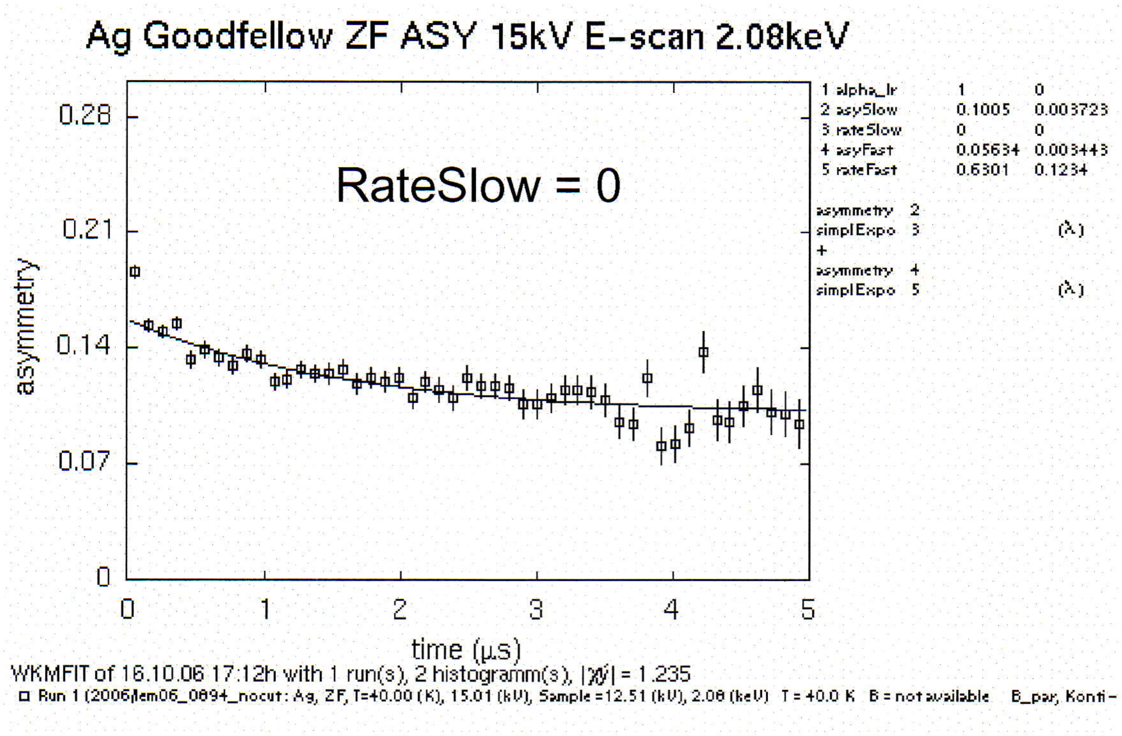


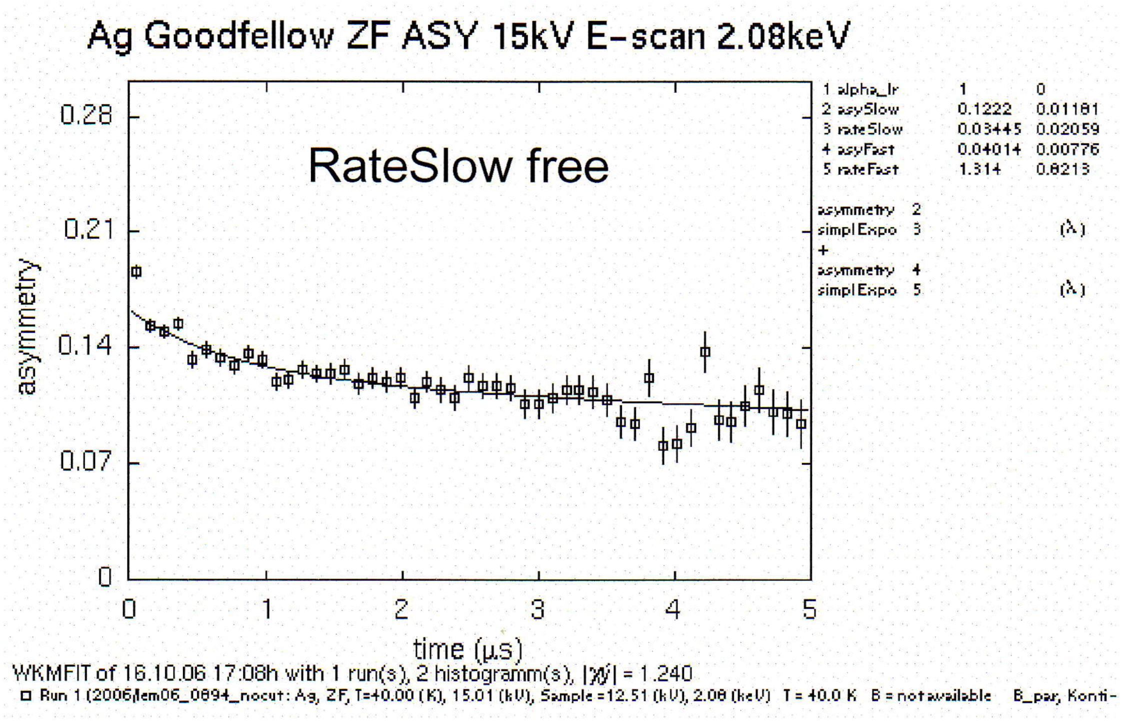
Comparizon 12kV and 15kV transport



bkg 66000-66500

2keV ASY Fits (15kV)

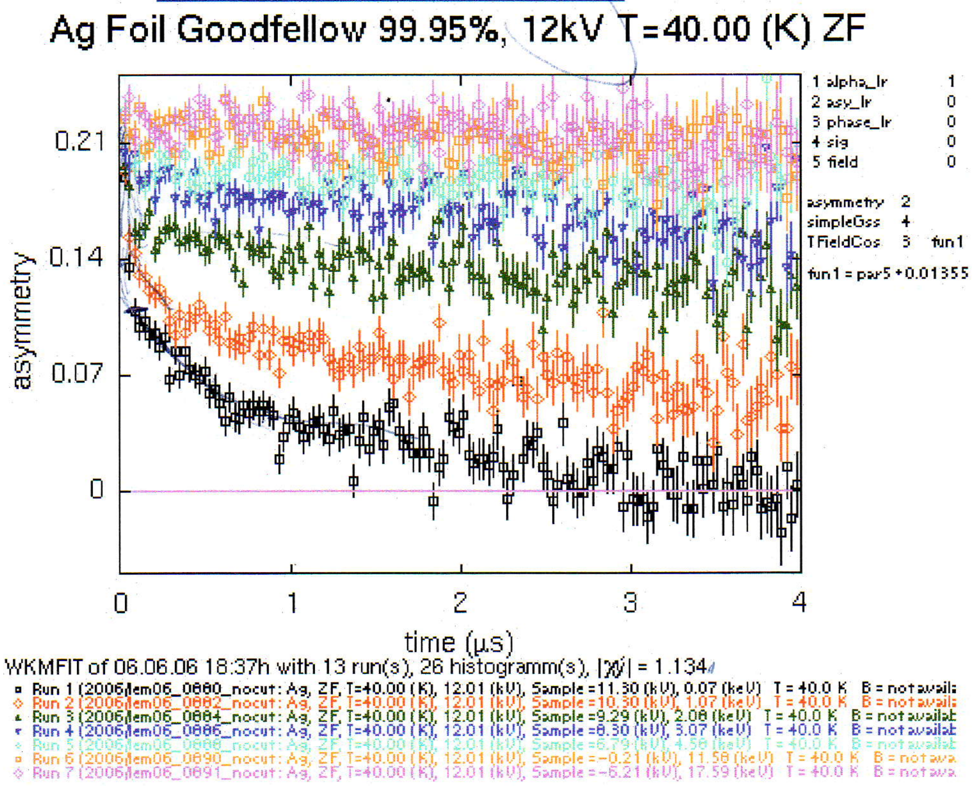




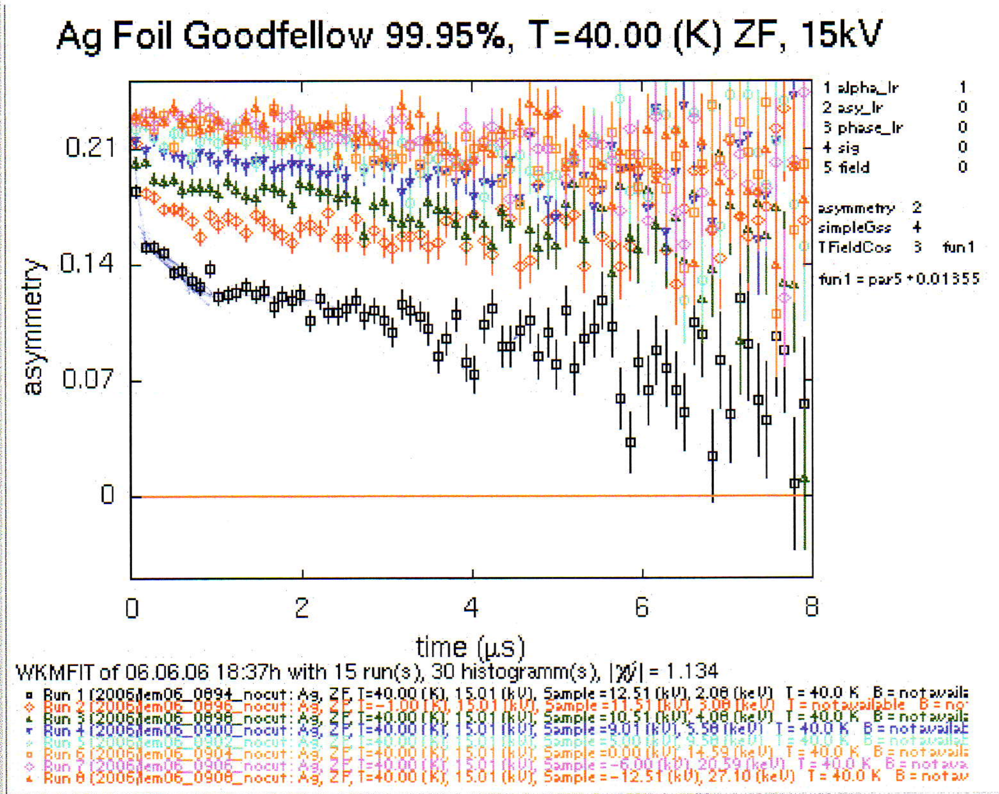
MIDAS Electronic Logbook	Experiment "nemu"
New Edit Reply Query Runlog Status	
Last 8h Last 24h Last 7d	
Next Previous Last *Check a category to browse only entries from that category*	
Entry date: **Mon Jun 26 13:32:11 2006**	Run number: **915**
☐ Author: **hl@pc4765.psi.ch**	☐ Type: **Shift summary**
☐ System: **General**	☐ Subject: **summary Ag ZF spectra**

```
here are some ZF spectra for the Goodfellow Ag foil.

Figure 1: ZF, 40K, 12kV, E= 0.07 - 17.58keV
Figure 2: ZF, 40K, 15kV, E= 2.07 - 27.01keV
Figure 3: ZF, 15kV, E= 2.07 - 3.58keV, comparizon between 40K and 250K

There is an energy dependend damping.
The temperature does not play a role.
```

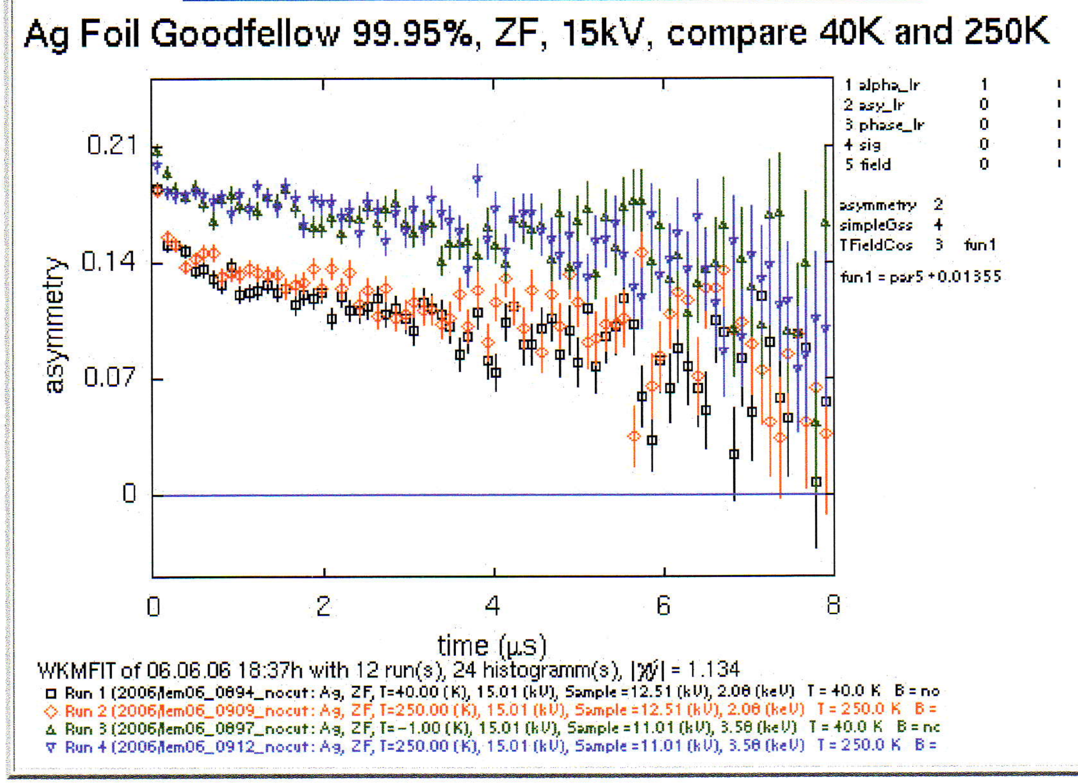
Attachment: **12kV-40K-0.07-17.58keV-long.jpg**



Attachment: **15kV-40K-2.07-27.1keV-long.jpg**



Attachment: [15kV-compare-40K_and_250K-2.07-3.58keV-long.jpg]

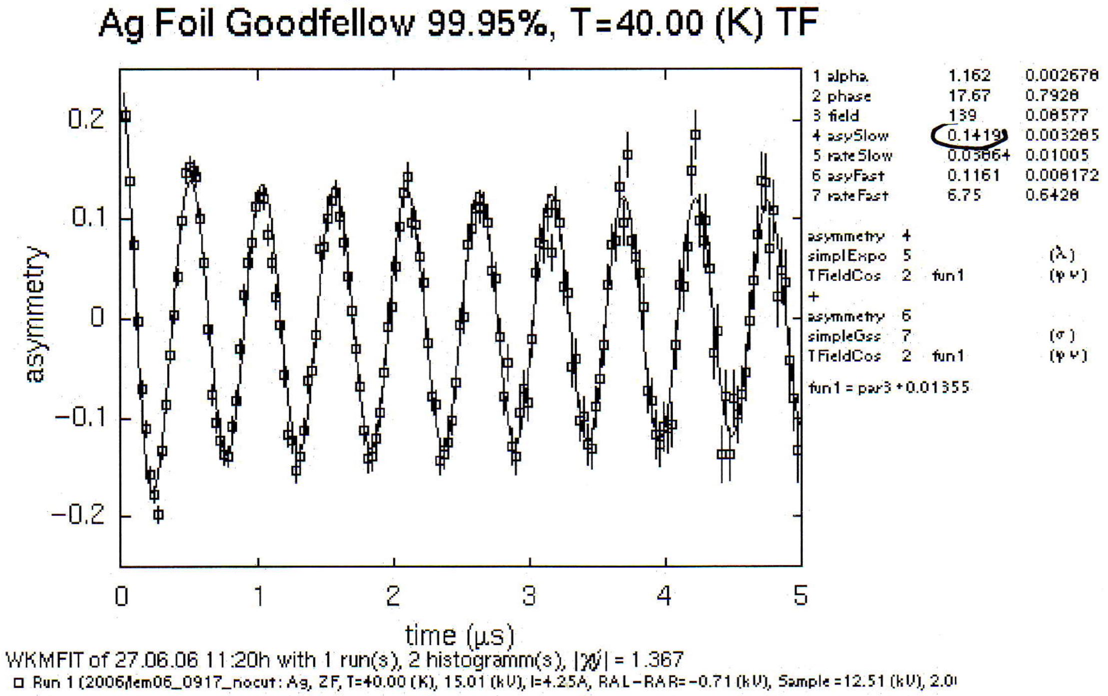


 28.06.2006 14:25

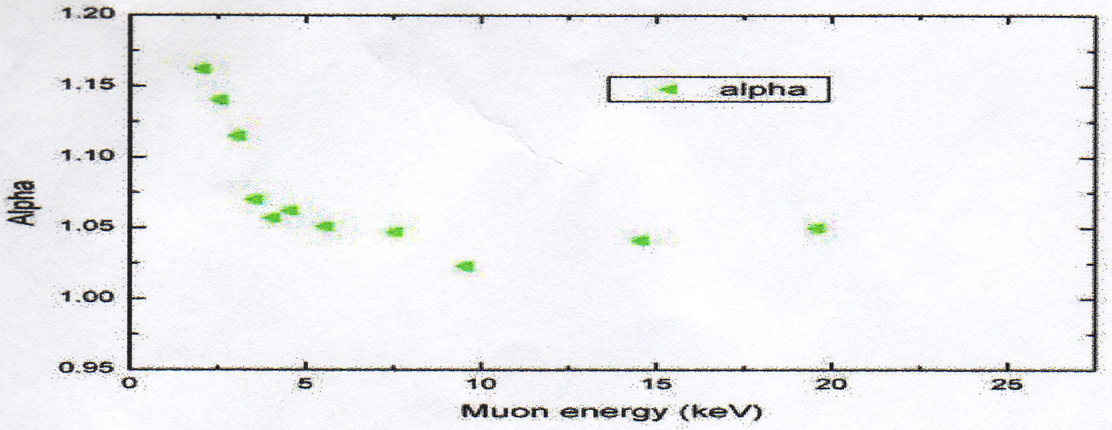
MIDAS Electronic Logbook	Experiment "nemu"
New Edit Reply Query Runlog Status	
Last 8h Last 24h Last 7d	
Next Previous Last *Check a category to browse only entries from that category*	
Entry date: **Tue Jun 27 13:18:05 2006**	Run number: **927**
Author: **hl@pc4765.psi.ch**	Type: **Info**
System: **General**	Subject: **online Ag TF results**

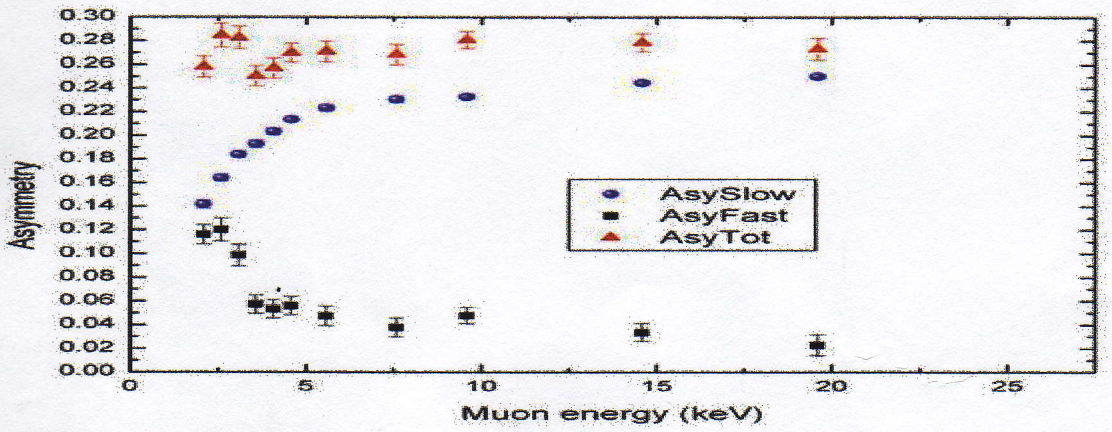
```
Here are some results for the Ag foil,
TF, 15kV, 140G.

- the alpha shifts at low energies
- there is a fast (7-10MHz) and a slow relaxation (0.1-0MHz)
- the total asymmetry is nearly constant (which is strange)
- the slow asymmetry does not follow the TRIM calculation
- note the correlation of alpha and asymmetries
(it not real see: http://pc5332:8080/EL/060628.1768?exp=nemu)

Remark from Thomas:
Backscattering of mu+ as calculated by TrimSP may be wrong,
since it does not follow the "general" Thomas-scaling,
see the Memo
http://nemu.web.psi.ch/doc/LEM_Memo/TrimSP/trimsp_muon_reflection.pdf
However, it appears, that something else is going on here with the
"fast"/"slow" relaxing components; we should repeat these measurements
with a pure Ag film (sputtered) in autumn.
Thomas.
```

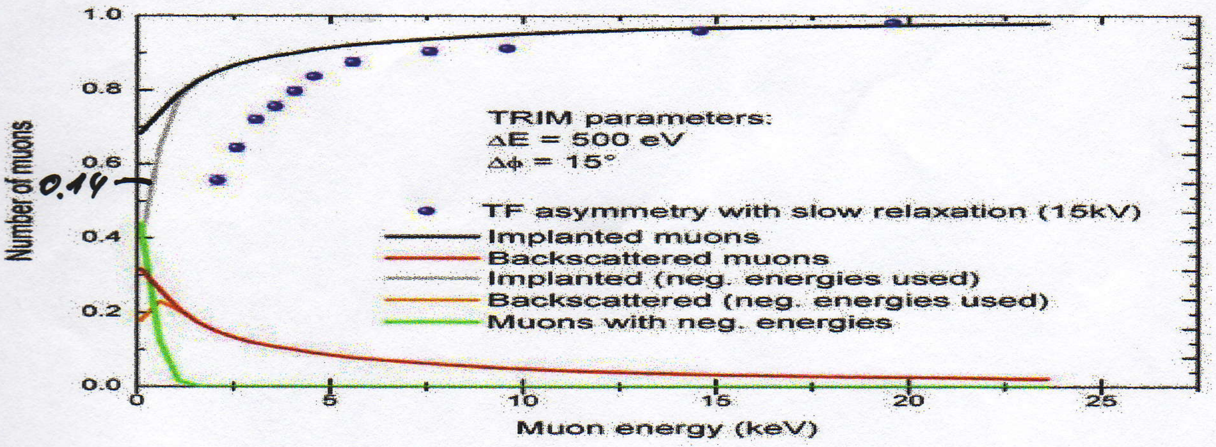
Attachment: **15kV-40K-2.08keV-TF.jpg**

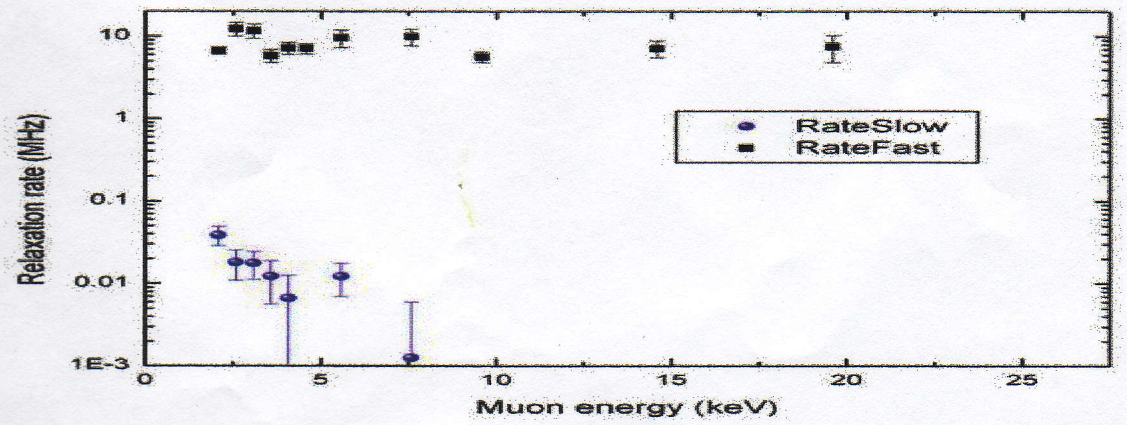


Attachment: **online-Ag-TF-results.jpg**


alpha
Alpha
Muon energy (keV)


AsySlow
AsyFast
AsyTot
Asymmetry
Muon energy (keV)

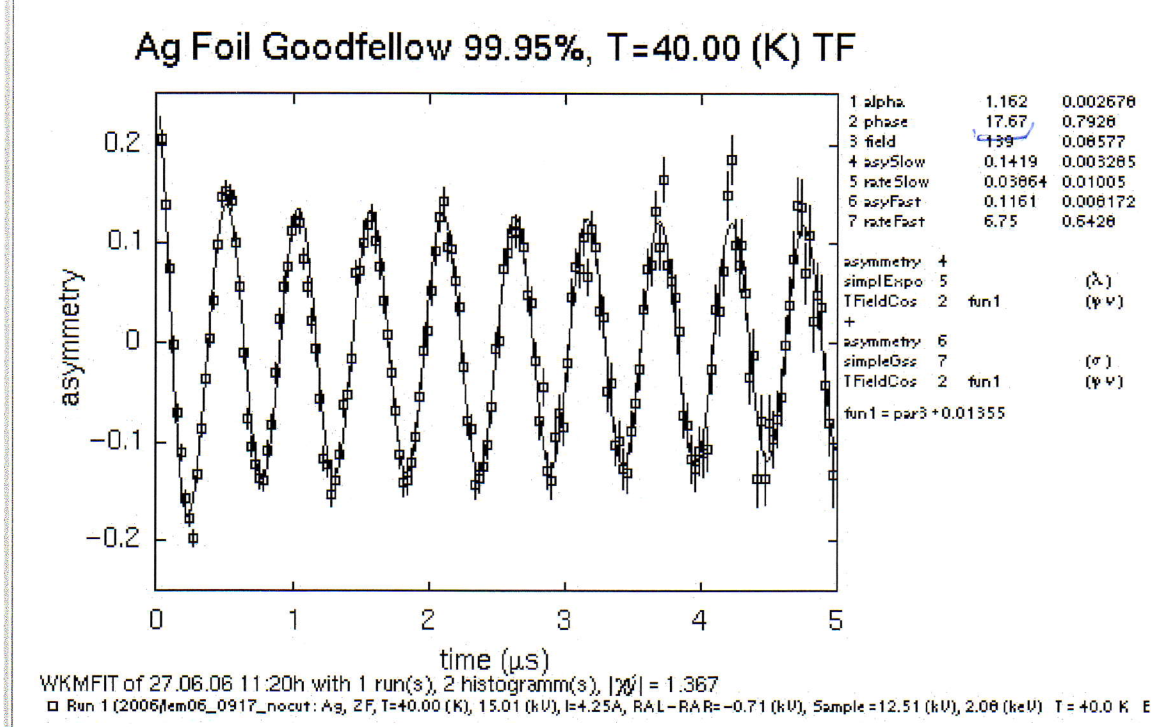

TRIM parameters:
ΔE = 500 eV
Δφ = 15°
TF asymmetry with slow relaxation (15kV)
Implanted muons
Backscattered muons
Implanted (neg. energies used)
Backscattered (neg. energies used)
Muons with neg. energies
Number of muons
0.14
Muon energy (keV)

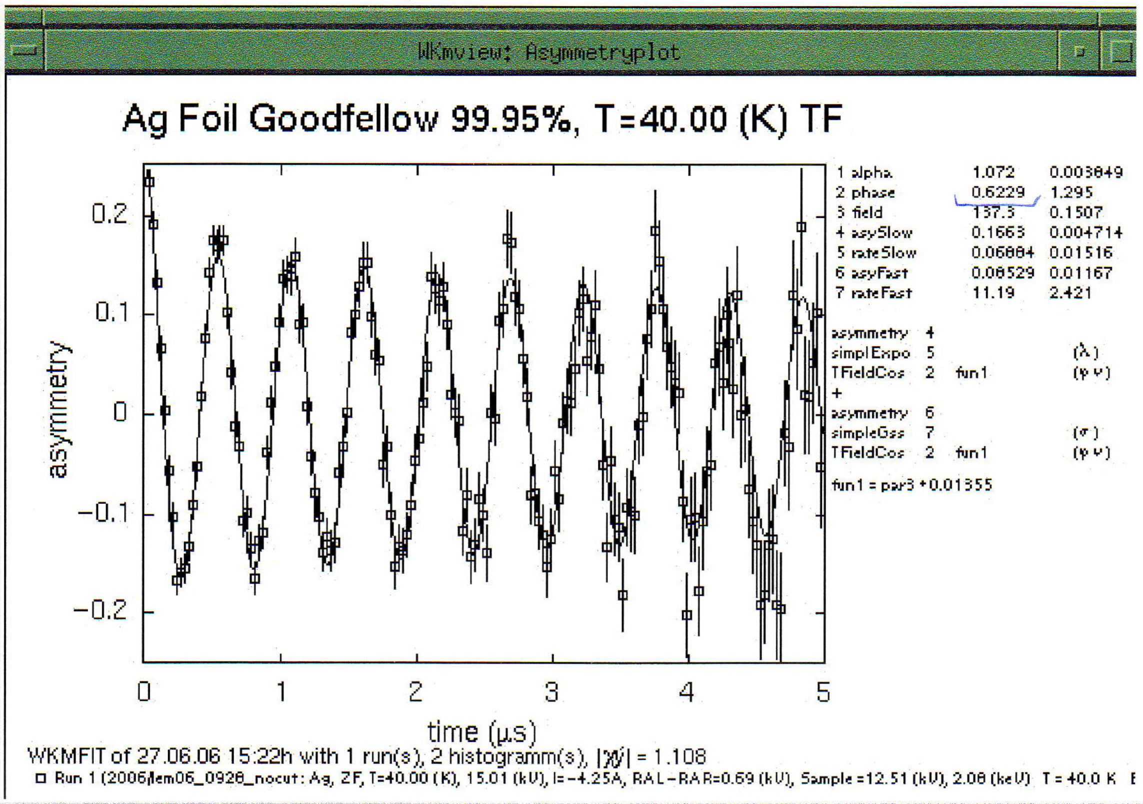

RateSlow
RateFast
Relaxation rate (MHz)
Muon energy (keV)

Entry date: **Tue Jun 27 15:31:50 2006**	Run number: **929**
Author: **hl@pc4765.psi.ch**	Type: **Routine**
System: **General**	Subject: **comparizon positive and negative B-field**

```
here are spectra at 2.08 keV measured in positive
and negative B-field. (also the RA difference was reversed).

the alphas are both above 1.0 indicating a shift of the beamspot
in the same direction. (but the shift with energie is in oposite
direction see alpha plot)

the spectra look similar, but the fast asymmetry is smaller for the
run with negative fields.
this run has also an alpha which is closer to 1.0.
maybe this is a general trend, that the more the alpha is 1.0
we have a smaller fast asymmetry.
see also the correlation of alpha and the asymmetries in the
E-dependence:
http://pc5332:8080/EL/060627.0?exp=nemu

this will be checked with RA steering runs over the night.
```

Attachment: **15kV-compare-2.08keV-pos-neg-field.jpg**


Ag Foil Goodfellow 99.95%, T=40.00 (K) TF
1 alpha 1.162 0.002678
2 phase 17.67 0.7928
3 field 139 0.08577
4 asySlow 0.1419 0.003285
5 rateSlow 0.03864 0.01005
6 asyFast 0.1161 0.008172
7 rateFast 6.75 0.6428
asymmetry 4
simplExpo 5 (λ)
TFieldCos 2 fun1 (φ ν)
+
asymmetry 6
simpleGss 7 (σ)
TFieldCos 2 fun1 (φ ν)
fun1 = par3 *0.01355
asymmetry
time (μs)
WKMFIT of 27.06.06 11:20h with 1 run(s), 2 histogramm(s), |χ²/ν| = 1.367
Run 1 (2006/lem06_0917_nocut: Ag, ZF, T=40.00 (K), 15.01 (kV), I=4.25A, RAL-RAR=-0.71 (kV), Sample=12.51 (kV), 2.08 (keV) T = 40.0 K


WKmview: Asymmetryplot
Ag Foil Goodfellow 99.95%, T=40.00 (K) TF
1 alpha 1.072 0.003849
2 phase 0.6229 1.295
3 field 137.3 0.1507
4 asySlow 0.1663 0.004714
5 rateSlow 0.06884 0.01516
6 asyFast 0.08529 0.01167
7 rateFast 11.19 2.421
asymmetry 4
simplExpo 5 (λ)
TFieldCos 2 fun1 (φ ν)
+
asymmetry 6
simpleGss 7 (σ)
TFieldCos 2 fun1 (φ ν)
fun1 = par3 *0.01355
asymmetry
time (μs)
WKMFIT of 27.06.06 15:22h with 1 run(s), 2 histogramm(s), |χ²/ν| = 1.108
Run 1 (2006/lem06_0928_nocut: Ag, ZF, T=40.00 (K), 15.01 (kV), I=-4.25A, RAL-RAR=0.69 (kV), Sample=12.51 (kV), 2.08 (keV) T = 40.0 K

MIDAS Electronic Logbook	Experim

New Edit Reply Query Runlog Status

Last 8h Last 24h Last 7d

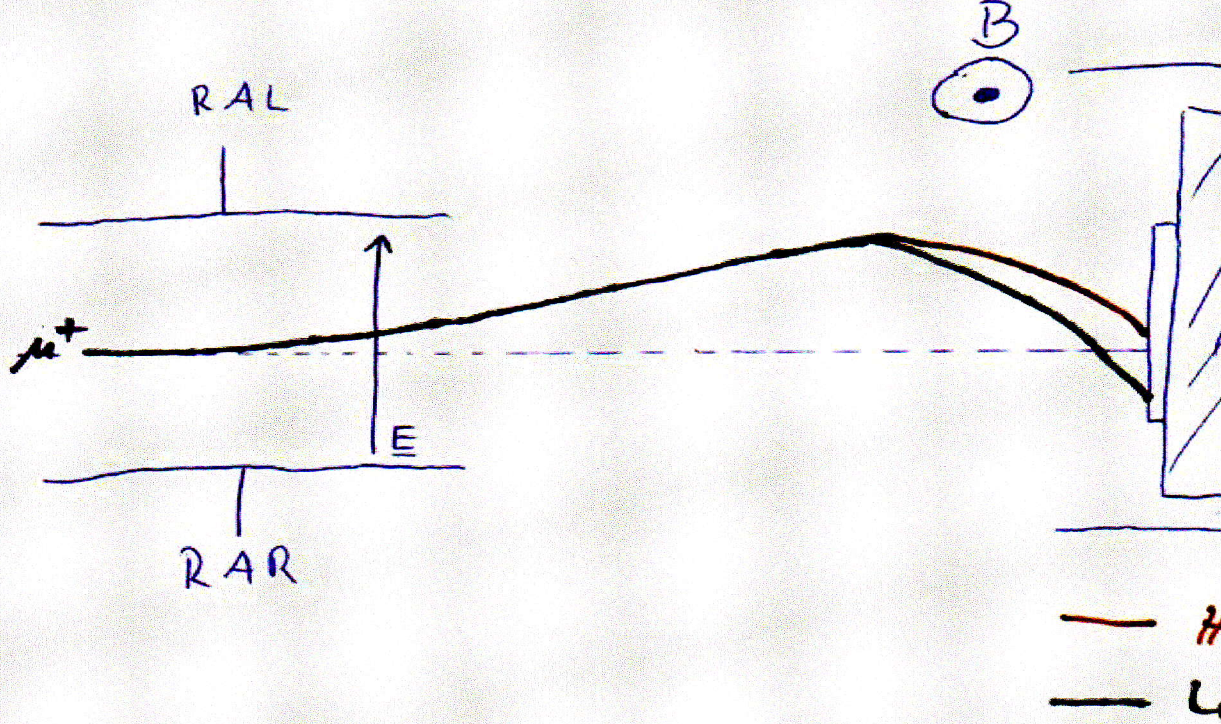
Next Previous Last *Check a category to browse only entries from that category*

Entry date: **Tue Jun 27 17:44:02 2006**	Run number: **931**
Author: **hl@pc4765.psi.ch**	Type: **Routine**
System: **General**	Subject: **apha shift with energ**

```
here some simple considerations on the
alpha shift (i always have to think about
it again, therefore i put it here).

These considerations explain the alpha shift
qualitatively for measurements with
transverse field. also the opposite shift with
negative B-fields agree with these considerations.

apparently also the ZF data show an alpha shift.
this is of cause not explained by this picture.
```

Attachment: **hubi0001-small.JPG**

Top view

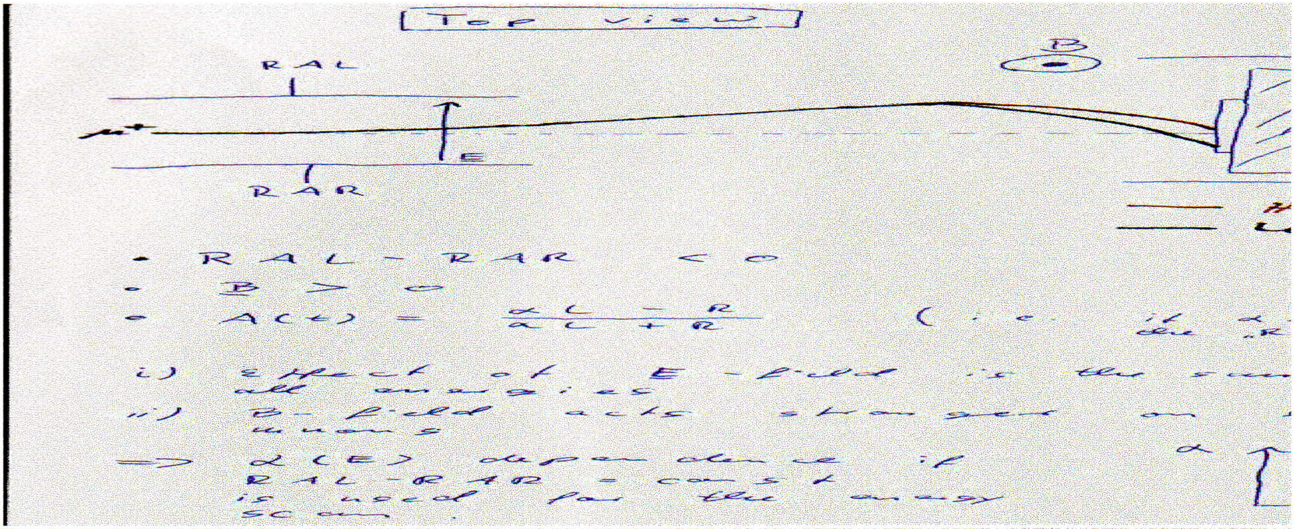


- RAL - RAR < 0
- $\underline{B} > 0$
- $A(t) = \dfrac{\alpha L - R}{\alpha L + R}$ (i.e. if α ... the „R

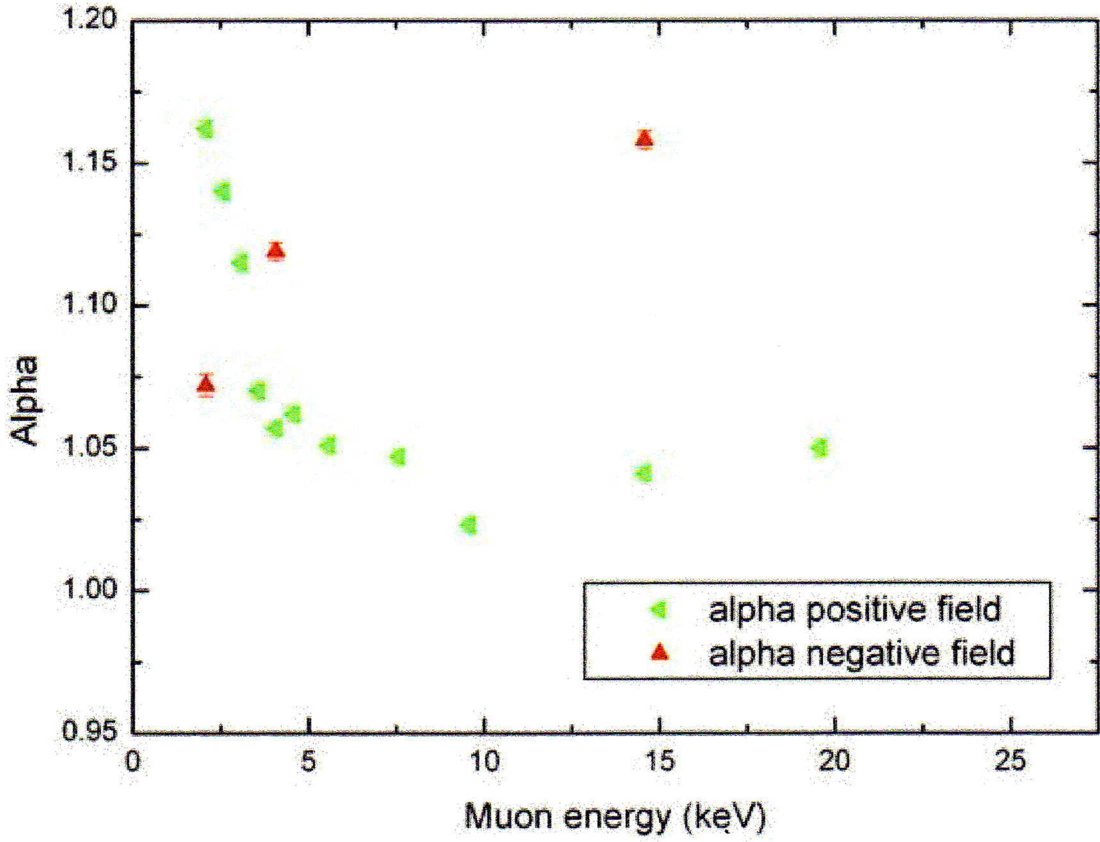
i) Effect of $\underline{E}$-field is the sam
all energies

ii) B-field acts stronger on
muons

$\Rightarrow$ $\alpha(E)$ dependence if
RAL - RAR = const
is used for the energy
scan.



Attachment: **pos-neg-alpha.jpg**



MIDAS Electronic Logbook	Experiment "

New | Edit | Reply | Query | Runlog | Status

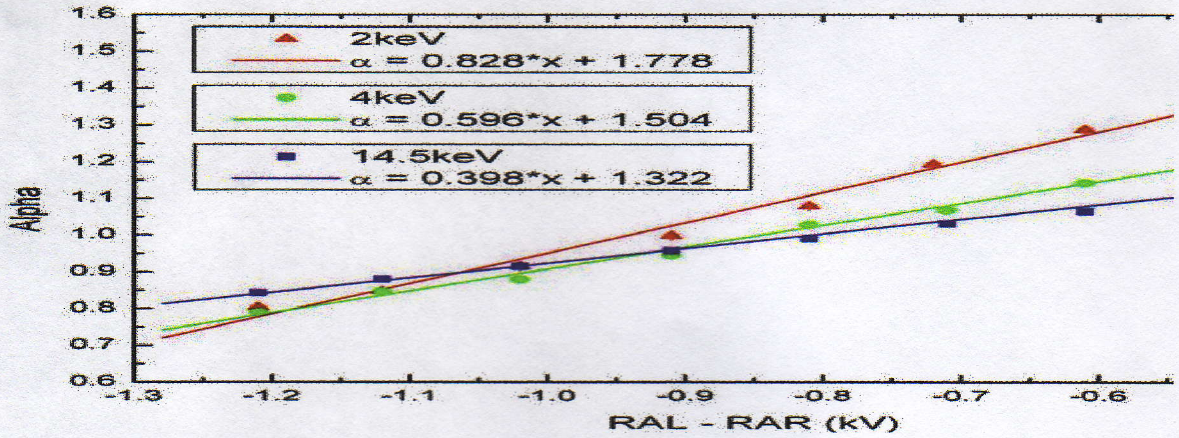
Last 8h | Last 24h | Last 7d

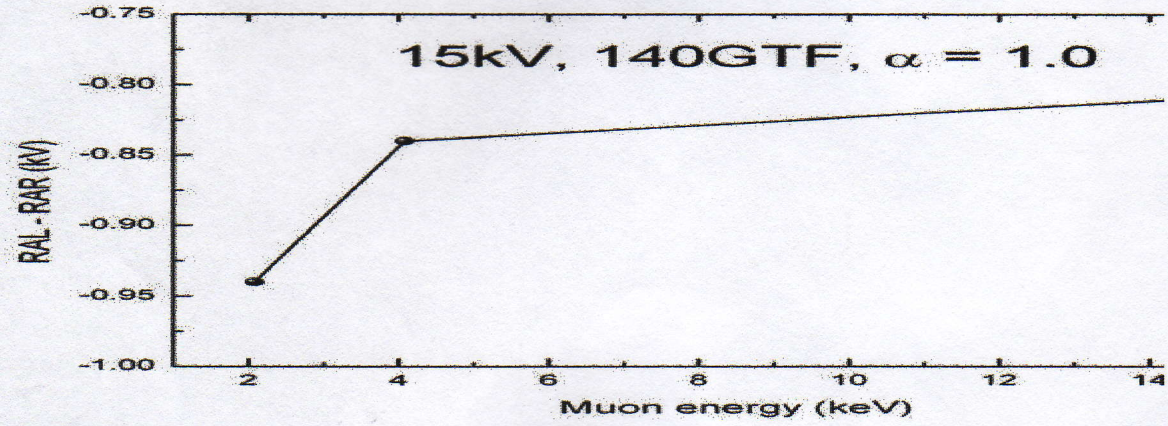
Next | Previous | Last *Check a category to browse only entries from that category*

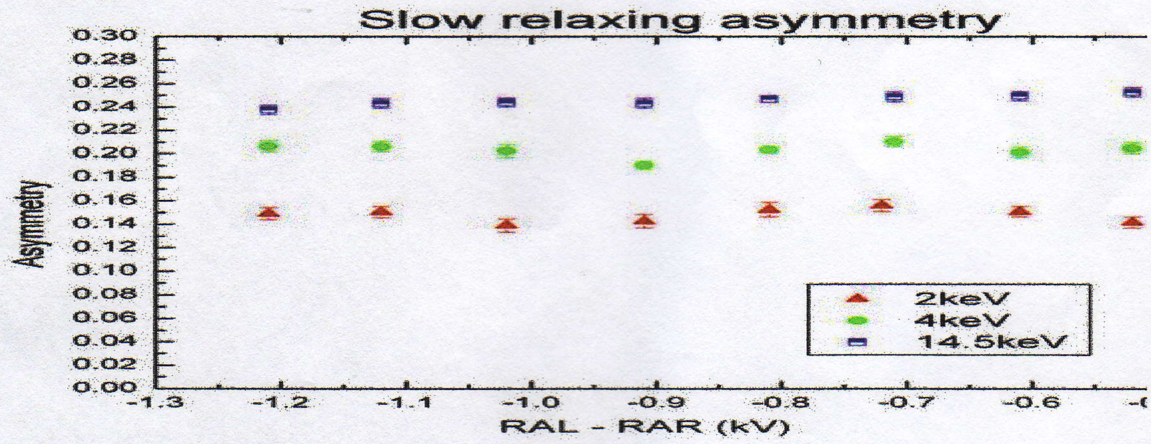
Entry date: **Wed Jun 28 14:06:13 2006**	Run number: **955**
Author: **hl@pc4765.psi.ch**	Type: **Shift summary**
System: **Analysis**	Subject: **TF RA steering, alpha**

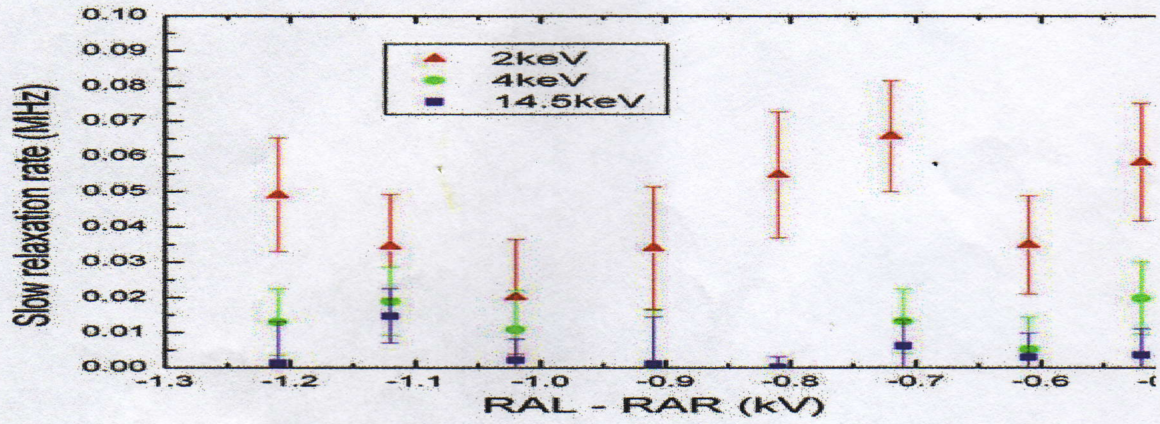
```
Here are the results of the steering of the beamspot with the
the RA.
The measurements were done with Bpar~140G and 15kV transport.

Results:
- the RAL-RAR not=0 shifts the beamspot  ;-)
- depending on the Sample HV, i.e. the muon energy
the shifting is different. Correspondingly different
alpha-shifts are observed for different energies.
- the alpha-shift is nearly linear with RAL-RAR
- the best RAL-RAR settings are shown for 3 energies (15kV, 140G)
- the slowly relaxing asymmetry has no correlation with alpha
or beam spot position.
(so the previous speculation was not correct.)
- also the damping is only slightly depending on the energie, but
not on alpha
```

Attachment: steering_results.jpg


2keV
α = 0.828*x + 1.778
4keV
α = 0.596*x + 1.504
14.5keV
α = 0.398*x + 1.322
Alpha
RAL - RAR (kV)


15kV, 140GTF, α = 1.0
RAL - RAR (kV)
Muon energy (keV)


Slow relaxing asymmetry
Asymmetry
2keV
4keV
14.5keV
RAL - RAR (kV)


2keV
4keV
14.5keV
Slow relaxation rate (MHz)
RAL - RAR (kV)

```
AG-Goodfellow-Foil Run list:
----------------------------

ZF runs:
--------
 880 2000.2k T=40.00 (K), 12.01 (kV), Sample =11.30 (kV), 0.07 (keV)
 881 2000.3k T=40.00 (K), 12.01 (kV), Sample =10.80 (kV), 0.57 (keV)
 882 2000.5k T=40.00 (K), 12.01 (kV), Sample =10.30 (kV), 1.07 (keV)
 883 2000.3k T=40.00 (K), 12.01 (kV), Sample =9.80 (kV), 1.57 (keV)
 884 2000.5k T=40.00 (K), 12.01 (kV), Sample =9.29 (kV), 2.08 (keV)
 885 2000.6k T=40.00 (K), 12.01 (kV), Sample =8.80 (kV), 2.58 (keV)
 886 2000.4k T=40.00 (K), 12.01 (kV), Sample =8.30 (kV), 3.07 (keV)
 887 2000.9k T=40.00 (K), 12.01 (kV), Sample =7.80 (kV), 3.57 (keV)
 888 2000.6k T=40.00 (K), 12.01 (kV), Sample =6.79 (kV), 4.58 (keV)
 889 2000.8k T=40.00 (K), 12.01 (kV), Sample =3.79 (kV), 7.58 (keV)
 890 2000.6k T=40.00 (K), 12.01 (kV), Sample =-0.21 (kV), 11.58 (keV)
 891 2000.8k T=40.00 (K), 12.01 (kV), Sample =-6.21 (kV), 17.59 (keV)
 892 2001.0k T=40.00 (K), 12.01 (kV), Sample =-12.22 (kV), 23.59 (keV)
 893  169.8k T=40.00 (K), 12.01 (kV), Sample =10.80 (kV), 0.57 (keV) long stat can be stop
 894 2001.1k T=40.00 (K), 15.01 (kV), Sample =12.51 (kV), 2.08 (keV)
 895 2001.3k T=40.00 (K), 15.01 (kV), Sample =12.01 (kV), 2.58 (keV)
 896 2000.2k T=-1.00 (K), 15.01 (kV), Sample =11.51 (kV), 3.08 (keV)
 897 2001.0k T=-1.00 (K), 15.01 (kV), Sample =11.01 (kV), 3.58 (keV)
 898 2000.8k T=40.00 (K), 15.01 (kV), Sample =10.51 (kV), 4.08 (keV)
 899 2001.6k T=40.00 (K), 15.01 (kV), Sample =10.01 (kV), 4.58 (keV)
 900 2000.7k T=40.00 (K), 15.01 (kV), Sample =9.01 (kV), 5.58 (keV)
 901 2001.3k T=40.00 (K), 15.01 (kV), Sample =7.01 (kV), 7.58 (keV)
 902 2000.7k T=40.00 (K), 15.01 (kV), Sample =5.00 (kV), 9.58 (keV)
 903 2000.8k T=40.00 (K), 15.01 (kV), Sample =3.00 (kV), 11.59 (keV)
 904 2000.9k T=40.00 (K), 15.01 (kV), Sample =0.00 (kV), 14.59 (keV)
 905 2000.8k T=40.00 (K), 15.01 (kV), Sample =-3.00 (kV), 17.59 (keV)
 906 2001.3k T=40.00 (K), 15.01 (kV), Sample =-6.00 (kV), 20.59 (keV)
 907 2000.7k T=40.00 (K), 15.01 (kV), Sample =-9.01 (kV), 23.60 (keV)
 908 1878.0k T=40.00 (K), 15.01 (kV), Sample =-12.51 (kV), 27.10 (keV)
 909 2001.2k T=250.00 (K), 15.01 (kV), Sample =12.51 (kV), 2.08 (keV)
 910 2001.4k T=250.00 (K), 15.01 (kV), Sample =12.01 (kV), 2.58 (keV)
 911 2000.5k T=250.00 (K), 15.01 (kV), Sample =11.51 (kV), 3.08 (keV)
 912 2000.6k T=250.00 (K), 15.01 (kV), Sample =11.01 (kV), 3.58 (keV)
 913 2000.5k T=250.00 (K), 15.01 (kV), Sample =10.51 (kV), 4.08 (keV)
 914 2000.4k T=250.00 (K), 15.01 (kV), Sample =10.01 (kV), 4.58 (keV)
 915 1169.8k T=250.00 (K), 15.01 (kV), Sample =9.01 (kV), 5.58 (keV)

TF runs (15kV, T=40K):
--------
  917 1501.3k  I=4.25A, RAL-RAR=-0.71 (kV), Sample =12.51 (kV), 2.08 (keV)
  918 1500.5k  I=4.25A, RAL-RAR=-0.71 (kV), Sample =12.01 (kV), 2.58 (keV)
  919 1501.6k  I=4.25A, RAL-RAR=-0.71 (kV), Sample =11.51 (kV), 3.08 (keV)
  920 1500.6k  I=4.25A, RAL-RAR=-0.71 (kV), Sample =11.01 (kV), 3.58 (keV)
  921 1500.9k  I=4.25A, RAL-RAR=-0.71 (kV), Sample =10.51 (kV), 4.08 (keV)
  922 1500.9k  I=4.25A, RAL-RAR=-0.71 (kV), Sample =10.01 (kV), 4.58 (keV)
  923 1500.3k  I=4.25A, RAL-RAR=-0.71 (kV), Sample =9.01 (kV), 5.58 (keV)
  924 1500.9k  I=4.25A, RAL-RAR=-0.71 (kV), Sample =7.01 (kV), 7.58 (keV)
  925 1500.5k  I=4.25A, RAL-RAR=-0.71 (kV), Sample =5.00 (kV), 9.58 (keV)
  926 1500.8k  I=4.25A, RAL-RAR=-0.71 (kV), Sample =-0.01 (kV), 14.59 (keV)
  927 1054.9k  I=4.25A, RAL-RAR=-0.71 (kV), Sample =-5.00 (kV), 19.59 (keV)
  928 1001.0k  I=-4.25A, RAL-RAR=0.69 (kV), Sample =12.51 (kV), 2.08 (keV)
  929 1000.8k  I=-4.25A, RAL-RAR=0.69 (kV), Sample =10.51 (kV), 4.08 (keV)
  930 1001.0k  I=-4.25A, RAL-RAR=0.69 (kV), Sample =-0.01 (kV), 14.59 (keV)
  931  500.9k  I=4.25A, RAL-RAR=-1.21 (kV), Sample =12.51 (kV), 2.08 (keV)
  932  501.1k  I=4.25A, RAL-RAR=-1.12 (kV), Sample =12.51 (kV), 2.08 (keV)
  933  501.3k  I=4.25A, RAL-RAR=-1.02 (kV), Sample =12.51 (kV), 2.08 (keV)
  934  500.9k  I=4.25A, RAL-RAR=-0.91 (kV), Sample =12.51 (kV), 2.08 (keV)
  935  500.1k  I=4.25A, RAL-RAR=-0.81 (kV), Sample =12.51 (kV), 2.08 (keV)
  936  500.8k  I=4.25A, RAL-RAR=-0.72 (kV), Sample =12.51 (kV), 2.08 (keV)
  937  500.8k  I=4.25A, RAL-RAR=-0.61 (kV), Sample =12.51 (kV), 2.08 (keV)
  938  500.4k  I=4.25A, RAL-RAR=-0.52 (kV), Sample =12.51 (kV), 2.08 (keV)
  939  500.3k  I=4.25A, RAL-RAR=-1.21 (kV), Sample =10.51 (kV), 4.08 (keV)
  940  500.2k  I=4.25A, RAL-RAR=-1.12 (kV), Sample =10.51 (kV), 4.08 (keV)
```

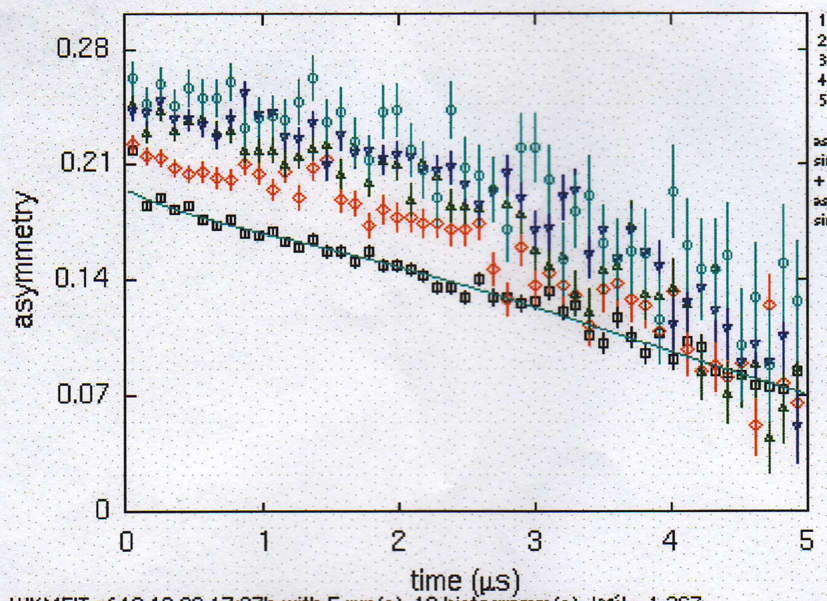
```
941  500.8k  I=4.25A, RAL-RAR=-1.02 (kV), Sample =10.51 (kV), 4.08 (keV)
942  500.6k  I=4.25A, RAL-RAR=-0.91 (kV), Sample =10.51 (kV), 4.08 (keV)
943  500.5k  I=4.25A, RAL-RAR=-0.81 (kV), Sample =10.51 (kV), 4.08 (keV)
944  500.8k  I=4.25A, RAL-RAR=-0.71 (kV), Sample =10.51 (kV), 4.08 (keV)
945  500.9k  I=4.25A, RAL-RAR=-0.61 (kV), Sample =10.51 (kV), 4.08 (keV)
946  500.4k  I=4.25A, RAL-RAR=-0.52 (kV), Sample =10.51 (kV), 4.08 (keV)
947  500.3k  I=4.25A, RAL-RAR=-1.21 (kV), Sample =-0.01 (kV), 14.59 (keV)
948  500.3k  I=4.25A, RAL-RAR=-1.12 (kV), Sample =-0.01 (kV), 14.59 (keV)
949  501.3k  I=4.25A, RAL-RAR=-1.02 (kV), Sample =-0.01 (kV), 14.59 (keV)
950  500.4k  I=4.25A, RAL-RAR=-0.91 (kV), Sample =-0.01 (kV), 14.59 (keV)
951  500.7k  I=4.25A, RAL-RAR=-0.81 (kV), Sample =-0.01 (kV), 14.59 (keV)
952  500.3k  I=4.25A, RAL-RAR=-0.71 (kV), Sample =-0.01 (kV), 14.59 (keV)
953  500.9k  I=4.25A, RAL-RAR=-0.61 (kV), Sample =-0.01 (kV), 14.59 (keV)
954  501.3k  I=4.25A, RAL-RAR=-0.52 (kV), Sample =-0.01 (kV), 14.59 (keV)
955  309.8k  I=4.25A, RAL-RAR=-1.02 (kV), Sample =12.51 (kV), 2.08 (keV) Last
```

Sputtered Ag (09/2006) 30x30mm
for ZF and TF for B_perp setup

Conclusion:

ZF E-scan

Ag Sputtered ZF ASY 15kV 2, 3, 4,5 7.5keV



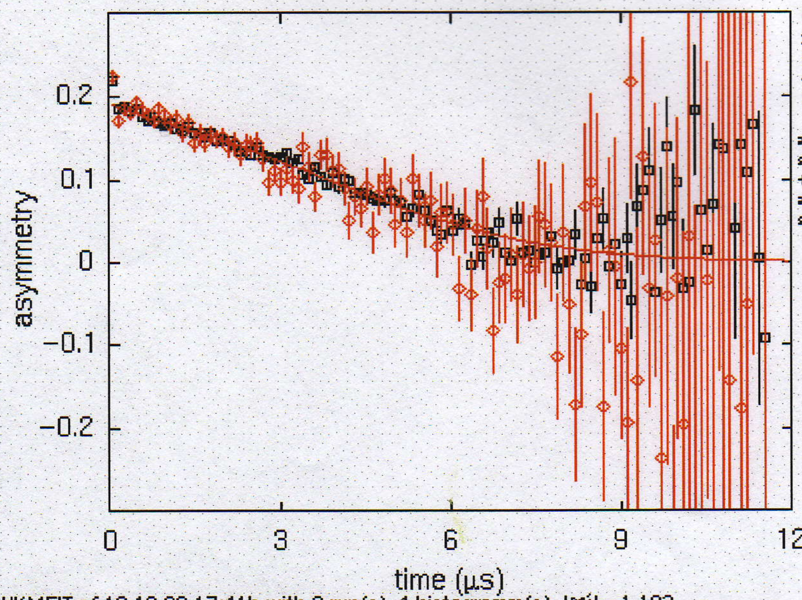
1	alpha_lr	1	0
2	asySlow	0.1684	0.002479
3	rateSlow	0.2636	0.00472
4	asyFast	0.0263	0.002923
5	rateFast	1.528	0.3979

asymmetry 2
simpleGss 3 (σ)
+
asymmetry 4
simplExpo 5 (λ)

WKMFIT of 16.10.06 17:37h with 5 run(s), 10 histogramm(s), $|\chi^2_\nu|$ = 1.267

□ Run 1 (2006/lem06_1125_nocut: "Ag E-scan ZF T=40.00 (K), 15.01 (kV), Sample = 12.51 (kV), 2.08 (keV)" T = 40.0 K B = not available Bpe
◇ Run 2 (2006/lem06_1126_nocut: Ag test 3 kV energy T = 40.0 K B = not available Bperp, Bruker) Fittype 2, f:1-b:3, 0.10 bis 10.00, Pack 52C
△ Run 3 (2006/lem06_1127_nocut: "Ag E-scan ZF T=40.00 (K), 15.01 (kV), Sample = 10.59 (kV), 4.00 (keV)" T = 40.0 K B = not available Bpe
▽ Run 4 (2006/lem06_1128_nocut: "Ag E-scan ZF T=40.00 (K), 15.01 (kV), Sample = 9.59 (kV), 5.00 (keV)" T = 40.0 K B = not available Bperp
○ Run 5 (2006/lem06_1129_nocut: "Ag E-scan ZF T=40.00 (K), 15.01 (kV), Sample = 7.09 (kV), 7.50 (keV)" T = 40.0 K B = 0.0000 Bperp, Bru

Ag Sput. ZF ASY 15kV 2.08keV (Bruker=0A, Bruker off)



1	alpha_lr	1	0
2	asySlow	0.1678	0.002642
3	rateSlow	0.2647	0.004783
4	asyFast	0.02533	0.002921
5	rateFast	1.314	0.3569

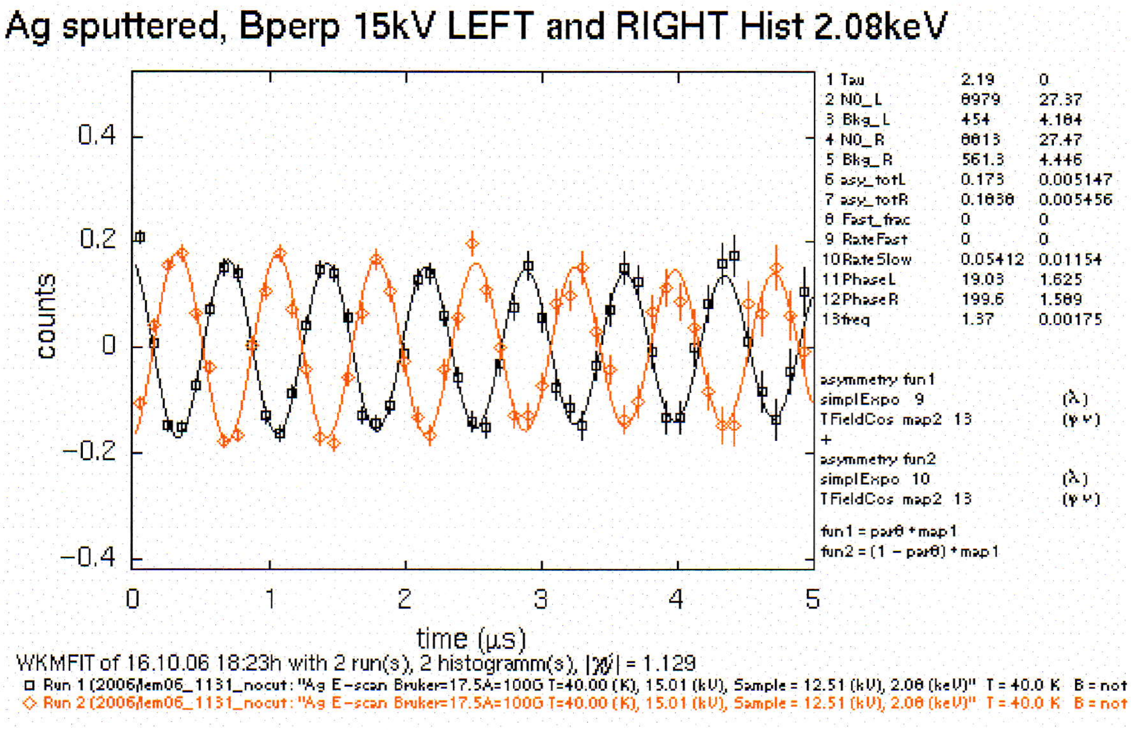
17 %

asymmetry 2
simpleGss 3 (σ)
+
asymmetry 4
simplExpo 5 (λ)

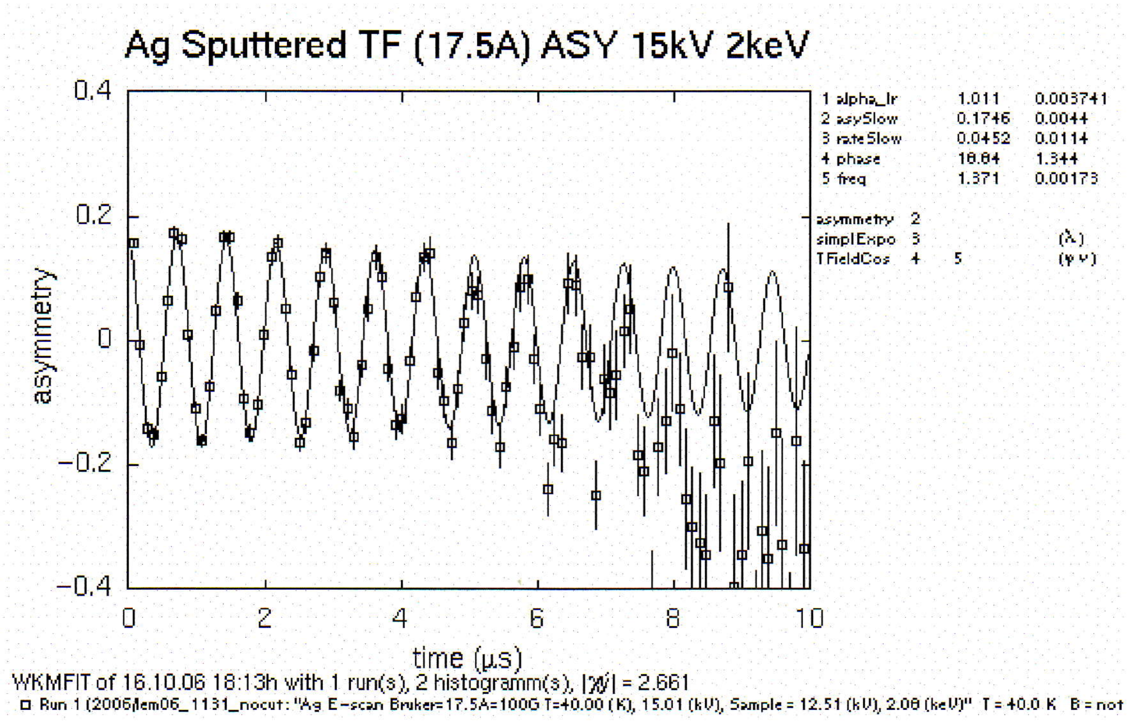
WKMFIT of 16.10.06 17:41h with 2 run(s), 4 histogramm(s), $|\chi^2_\nu|$ = 1.183

□ Run 1 (2006/lem06_1125_nocut: "Ag E-scan ZF T=40.00 (K), 15.01 (kV), Sample = 12.51 (kV), 2.08 (keV)" T = 40.0 K B = not available Bp
◇ Run 2 (2006/lem06_1130_nocut: Ag film, E-scan, ZF now with Brucker OFF, 12.5 kV on sample, E=2 keV T = 40.0 K B = 0.0000 Bperp, Bru

TF measurements



17 %



bkg 68000 - 66500

MIDAS Electronic Logbook	Experiment "nemu"

New | Edit | Reply | Query | Runlog | Status

Last 8h | Last 24h | Last 7d

Next | Previous | Last *Check a category to browse only entries from that category*

Entry date: **Thu Sep 28 16:38:20 2006**	Run number: **1130**
Author: **hl,gn@pc5596.psi.ch**	Type: **Routine**
System: **General**	Subject: **Ag run summary**

```
Here is a list of Ag (sputterd 30x30mm) runs:

15kv-transport

B_parallel setup:
----------------
1119  ZF  2.08 keV   (no Right detector)
1120  ZF  3 keV      (no Right detector)
1121  ZF  4 keV
1122  ZF  5 keV
1123  ZF  7.5 keV
1124  ZF  10 keV
unfortunately p-beam one day off -> no TF runs

B_perp setup:
-----------------
1125  ZF  2.08 keV   Bruker I=0A (long stat., AR stoped due to wrong alarm)
1126  ZF  3 keV   Bruker I=0A
1127  ZF  4 keV   Bruker I=0A
1128  ZF  5 keV   Bruker I=0A
1129  ZF  7.5 keV   Bruker I=0A
unfortunately problems with KV61 (no beam)
1130  ZF  2.08 keV Bruker off !

1131 100GTF  2.08 keV, Bruker I=17.5A
1132 100GTF  5    keV, Bruker I=17.5A
1133 100GTF 10    keV, Bruker I=17.5
```