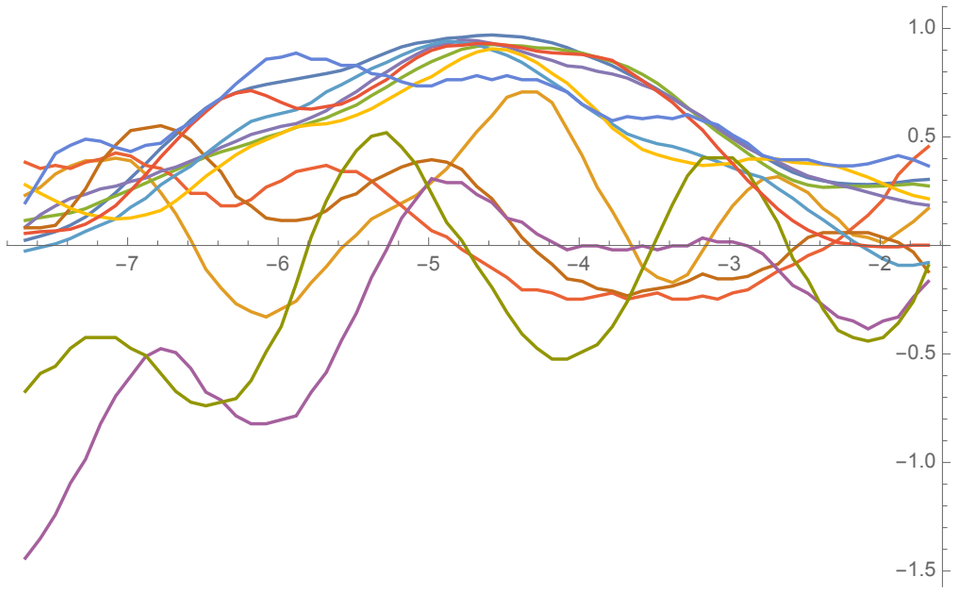
Some comments on our bulk 128 micron

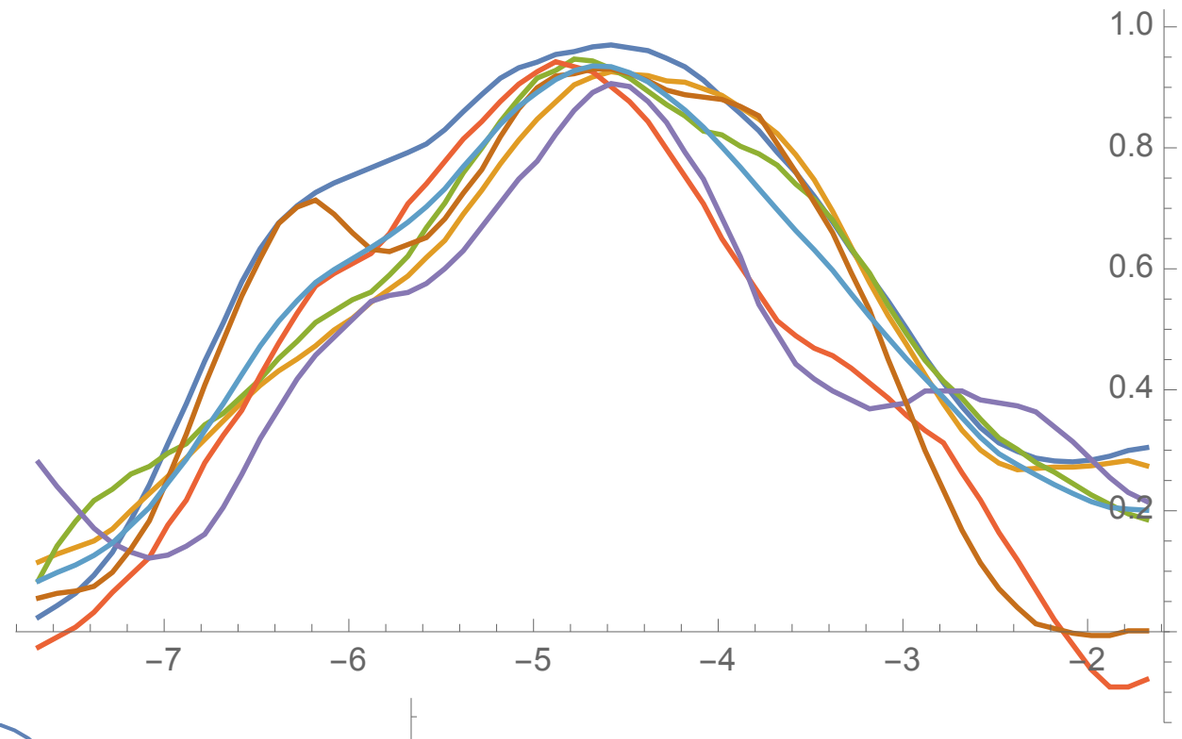
Sebastian White

	Vdrift	edrift(kV/cm)	vdrift(cm/musec)	sigmal(mum/cm)	alpha(/cm)	vbulk	ebulk(kV/cm)	vdriftb(cm/musec)	alphab(/cm)	N(pe)
425-620x20	195	0.98	10	240	100	425	33	28	700	79
bulk128-500-700										
	200	1	10	240	100	500	39	31	800	0.4,4,8

1) do we have a consistent set of bulk 128 data for sigmat vs Npe?
2) Can we unravel role of pre amplification?

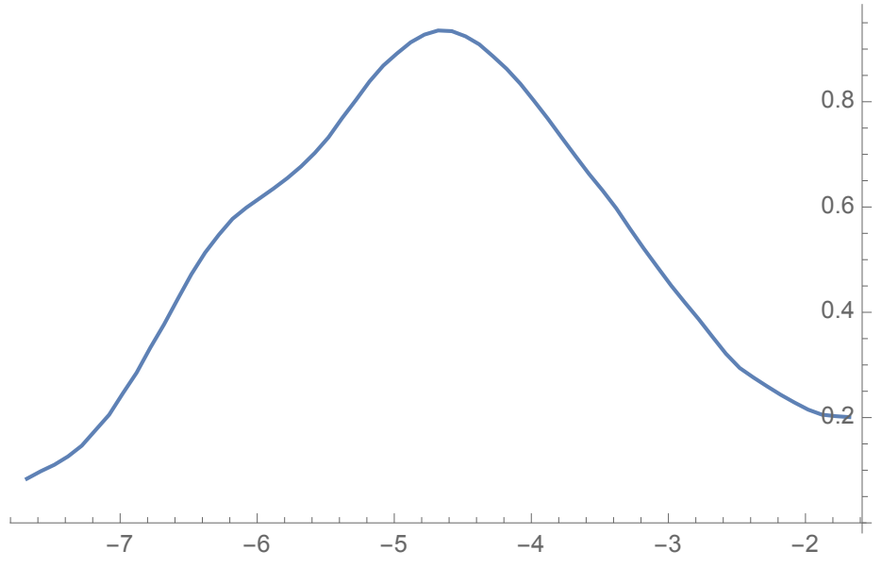
Data with Npe~0.4



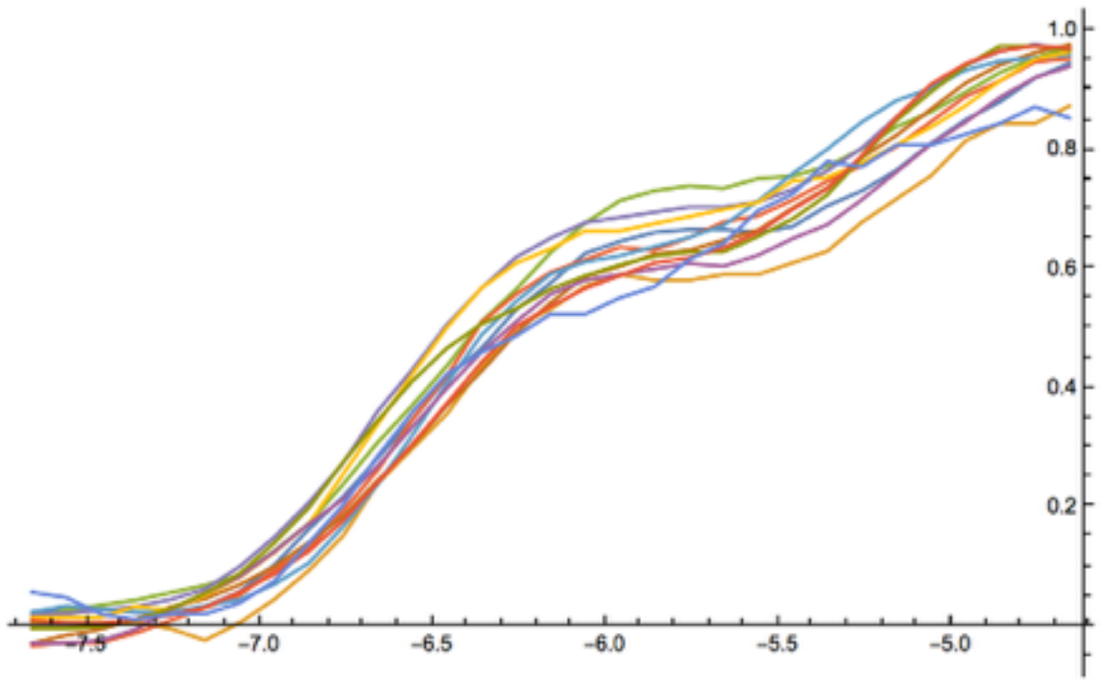


Normalized signal vs. t (nanosec)

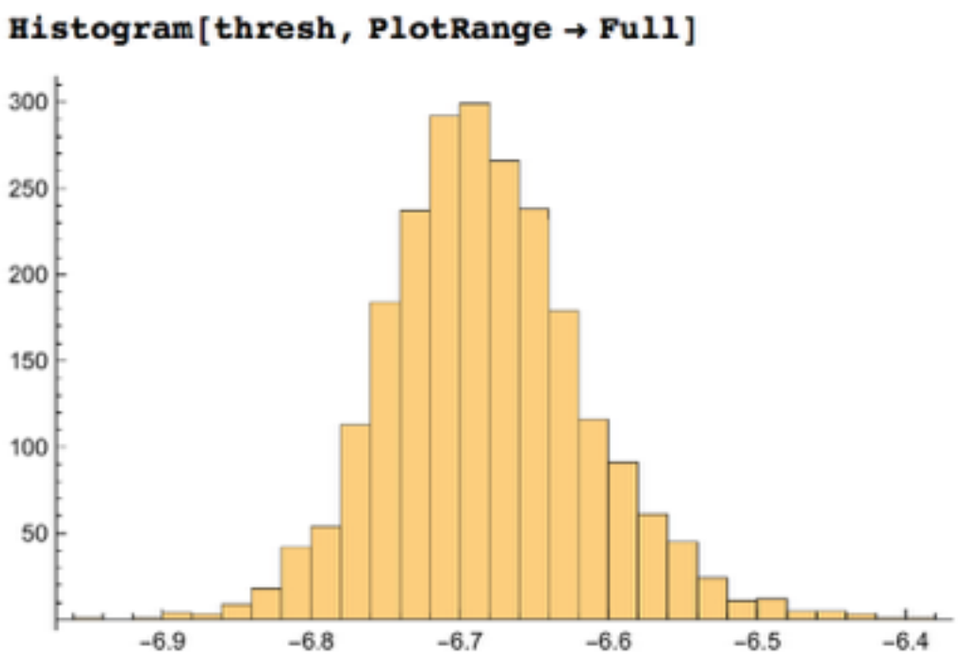
template



Data w. Npe~4



a dozen leading edge waveforms (nanosec)

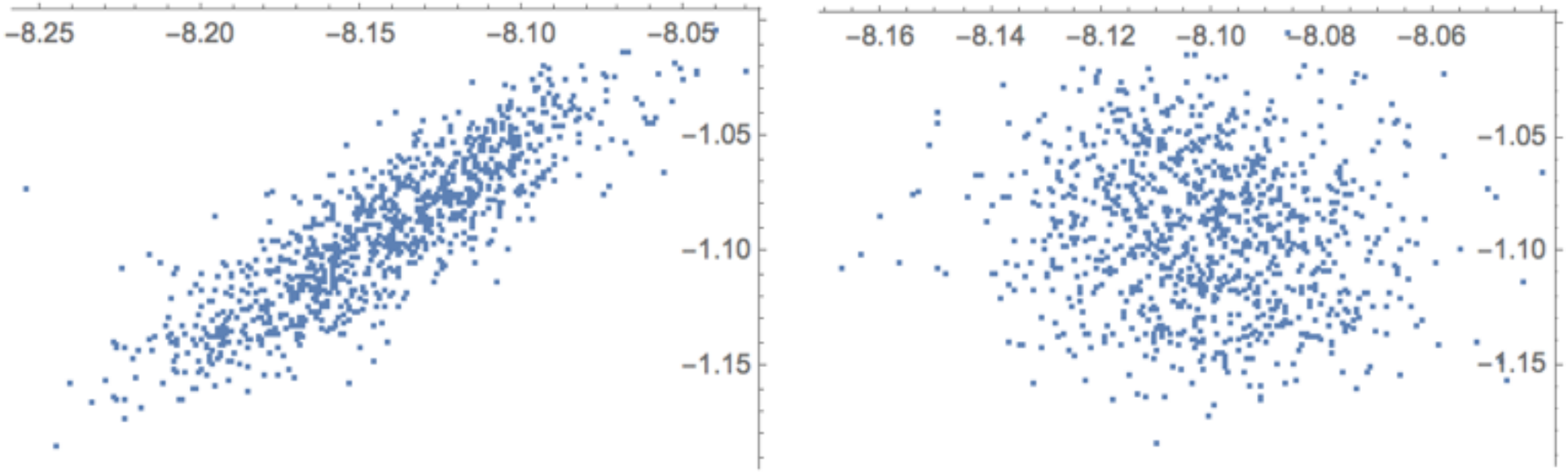


35% Constant Fraction time

Data w. Npe~79

Excellent!

```
GraphicsRow[{ListPlot[Transpose[{thresh, thresh1}]],
  ListPlot[Transpose[{thresh - (thresh1 + 1.05), thresh1}]]}, ImageSize → Large]
```




```
mn2 = Mean[thresh - (thresh1 + 1.05)]
rms2 = RootMeanSquare[(thresh - (thresh1 + 1.05)) - mn2]
```

```
-8.10117
```

```
0.0186925
```