

22.10.24 Slot Cyce

- Home position set:  $x\ 22\ |y\ 133.25 = 66.625$
- Wheel is removed, we start with large aperture
- still mounted 2line, start with dark voltage

{ 2line - Dark Voltage Scan - ... }

{ 2line - Voltage Scan - ... }  $2.01 \rightarrow 1.97\text{ nA}$

$\Rightarrow$  We again choose  $1.9\text{ V}$

- $y$ -translated for normalization { - YScan - }  $2.00\text{ nA} \rightarrow 1.80\text{ nA}$   
 $\hookrightarrow$  from  $32.625 \rightarrow 100.625$

- Linearity + Voltage ( $1 \rightarrow 2\text{ V}$ ,  $0.1\text{ V}$  steps): { Linearity }

-  $0.50\text{ nA} \rightarrow 0.496\text{ nA}$

-  $1.00\text{ nA} \rightarrow 0.998\text{ nA}$

-  $1.50\text{ nA} \rightarrow 1.484\text{ nA}$

-  $2.00\text{ nA} \rightarrow 2.48\text{ nA}$

- Galchronic comparisons:  $0 \rightarrow 44 \times \text{scan}$  0.5 steps { GalComp x }

•  $200\text{ }\mu\text{m}$  diffuser:  $2.01\text{ nA} \rightarrow 1.96\text{ nA}$

$\hookrightarrow$  Galchronic delay:  $\sim 5\text{ min}$

•  $400\text{ }\mu\text{m}$  diffuser:  $1.00\text{ nA} \rightarrow 0.995\text{ nA}$

$\hookrightarrow$  Gal delay:  $\sim 5\text{ min}$

•  $40\text{ }\mu\text{m}$  diff:  $2.03\text{ nA} \rightarrow 1.986\text{ nA}$

$\hookrightarrow$  Gal delay:  $\sim 5\text{ min}$

• Logo  $200\text{ }\mu\text{m}$  diff:  $2.03\text{ nA} \rightarrow 2.01\text{ nA}$

$\hookrightarrow$  Gal delay:  $\sim 8\text{ min}$

• Misc  $200\text{ }\mu\text{m}$  diff:  $2.02\text{ nA} \rightarrow 2.00\text{ nA} \rightarrow$  Gal delay  $\sim 5\text{ min}$

• Wedge PTEK  $200\text{ }\mu\text{m}$  diff:  $2.00\text{ nA} \rightarrow 1.93\text{ nA} \rightarrow$  Gal delay  $\sim 5\text{ min}$

- We image a mouse-foot { MouseFoot }  $2.01\text{ nA} \rightarrow 1.99\text{ nA}$

$\hookrightarrow$  again with better resolution { MouseFoot 2 }  $2.00\text{ nA} \rightarrow 1.99\text{ nA}$   
 $\hookrightarrow$  Galchronic



- Beam Scan :  $203 \text{ nA} \rightarrow 2,00 \text{ nA}$

~~aperture~~

- We change to the new 2D matrix (same middle position)

- Dark Voltage { 2D Charge - Dark Voltage - }

- Signal Voltage { 2D Charge - Voltage - }  $2,00 \text{ nA} \rightarrow 2,00 \text{ nA}$

- Y-translation { - Y Translation - }  $2,00 \text{ nA} \rightarrow 2,00 \text{ nA}$

- we change to no diffuser +  $2 \text{ nA}$  for movie over Couch

↳ after Couch  $1,82 \text{ nA}$  { Movie Beam }

- we use a new ~~diffuser~~ aperture: quadratic, shadowing parts of the matrix

↳ we start at  $100 \text{ pA}$  and increase the current in <sup>32</sup> steps to  $2 \text{ nA}$  { Movie Current Increase } (step each  $\sim 20 \text{ s}$ )

15:34 We're at  $2 \text{ nA}$ , but we increase further <sup>forget to put  $200 \text{ pA}$  diffuser in filename</sup>

16:39 ↳ at the end  $3,60 \text{ nA}$

- we change back to  $36$  aperture and do a Linearity Test

↳  $500 \text{ pA} \rightarrow 500 \text{ pA}$

•  $1,03 \text{ nA} \rightarrow 1,04 \text{ nA}$

•  $1,52 \text{ nA} \rightarrow 1,52 \text{ nA}$

•  $2,04 \text{ nA} \rightarrow 2,04 \text{ nA}$

•  $2,50 \text{ nA} \rightarrow 2,52 \text{ nA}$

- we make another movie: { Movie Beam Changes } <sup>start closing with diffuser</sup>

{ Movie Beam Change 2 } <sup>" without diffuser</sup>

↳ we also move in diffuser

15:23 we're moving

- We change the setup for the Cego moving

↳ We mount the Cego line vertically on the Y-stage (X-stage not inside vacuum box)

→ we move from  $40$  to  $310$  (meaning the Cego <sup>line</sup> is reversed) /  $0.5$  steps



- 200  $\mu\text{m}$  diffuser + 2 nA beam current 2,00  $\rightarrow$  2,16 nA

- We scanned all GaP channels with numbering #1 ~ corresponding to their order of creation