

# Analysis

06/08/2020

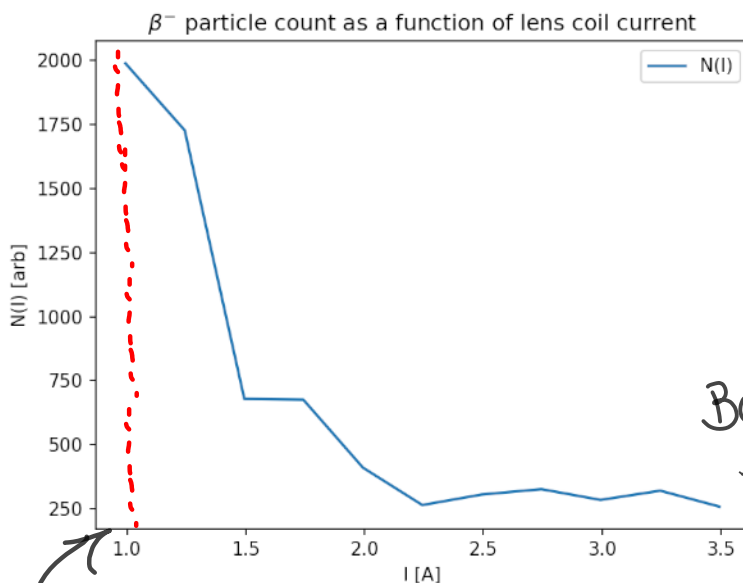
3 RUN (I will only consider this data in my analysis)  
Valid Data

Duration (s)	Count	Lens coil current (A)	u(Lens coil current) (A)	Bias coil current (A)	u(Bias coil current) (A)
600.005	1988	0.99343	0.0005	0.83093	0.0005
600.005	1727	1.24269	0.0005	0.83106	0.0005
600.008	679	1.49371	0.0005	0.83091	0.0005
600.007	676	1.74207	0.0005	0.83111	0.0005
600.004	411	1.99288	0.0005	0.83104	0.0005
600.004	265	2.24291	0.0005	0.83106	0.0005
600.005	306	2.49286	0.0005	0.83096	0.0005
600	327	2.74431	0.0005	0.83099	0.0005
600.009	285	2.99308	0.0005	0.83097	0.0005
600.002	321	3.24456	0.0005	0.83102	0.0005
600.006	259	3.49335	0.0005	0.831	0.0005

Magnetometer x position	Magnetometer y position	Magnetometer x-axis field	u(Magnetometer)	Magnetometer y-axis field	u(Magnetometer)	Magnetometer z-axis field strength (μT)	u(Magnetometer)
400	190	-362.61856	0.3	-35.86697	0.3	148.2517	0.3
400	190	-449.99378	0.3	-44.91145	0.3	185.44758	0.3
400	190	-537.9354	0.3	-53.9059	0.3	223.45595	0.3
400	190	-625.54941	0.3	-62.67791	0.3	261.6502	0.3
400	190	-714.12209	0.3	-71.35809	0.3	300.39517	0.3
400	190	-803.34455	0.3	-80.01129	0.3	338.86251	0.3
400	190	-891.95172	0.3	-88.22483	0.3	377.46732	0.3
400	190	-981.25639	0.3	-96.53003	0.3	416.37661	0.3
400	190	-1069.90218	0.3	-104.74846	0.3	454.82582	0.3
400	190	-1159.91273	0.3	-112.64221	0.3	494.20548	0.3
400	190	-1249.45357	0.3	-120.52033	0.3	532.30743	0.3

$N(I)$  vs  $I_{lens}$

14/08/2020



Booked another lab session 16/08/2020  
Bad Luck!

Stayed stuck for 20+min

I don't think that I have enough current values,  
+ starting at 1A was probably a bad choice!

**Magnetometer controls**

Magnetometer status: Calibrating...please wait

x set point: 400	Actual x position: 0	Field values (μT) (± 0.3 μT)
		x: -18.4
		y: 48.3
y set point: 190	Actual y position: 220	z: 4.9
		<button>Calibrate</button>

Booked another lab session 18/08/2020

Bugs Bugs Bugs