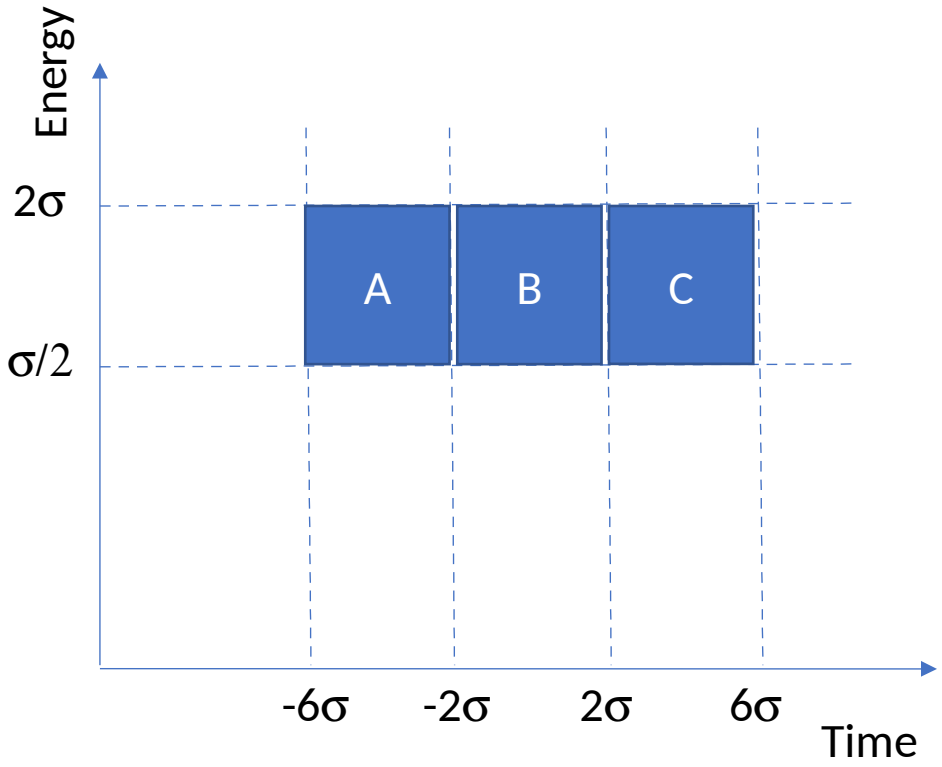
1. Using our standard process to define energy and time cuts for good Mott events (Region B), Daniel will also tally “before” events (Region A) and “after” events (Region C), corresponding to equal duration of time and exact same energies, corresponding to (N^+_A, N^-_A, N^+_B, N^-_B, N^+_C, N^-_C).



2. Daniel will compute 8 quantities for each run which will be statistically combined for each foil and used as we wish.

Description	Quantity
Region A total events	$N_A = N^+_A + N^-_A$
Region B total events	$N_B = N^+_B + N^-_B$
Region C total events	$N_C = N^+_C + N^-_C$
Dilution Number	$\langle DN \rangle = (N_A + N_C) / 2N_B$
Region A asymmetry	$\varepsilon_A = (N^+_A - N^-_A)/(N^+_A + N^-_A)$
Region B asymmetry	$\varepsilon_B = (N^+_B - N^-_B)/(N^+_B + N^-_B)$
Region C asymmetry	$\varepsilon_A = (N^+_C - N^-_C)/(N^+_C + N^-_C)$
Dilution Asymmetry	$\langle DA \rangle = 1 - (\varepsilon_{ABC} / \varepsilon_B)$

<DA> = Dilution Asymmetry [%] = $(1 - (\varepsilon_{ABC} / \varepsilon_{B})) * 100$ <DN> = Dilution Number [%] = $((N_A + N_C) / 2N_B) * 100$

Run I, Up/Down Physics Asymmetry			ToF Window : [-2 sigma : +2 sigma]					
			Dilution Asymmetry <DA>		Dilution Number <DN>			
Threshold	Foil	Thickness [nm]	Asymmetry [%]	dAsym [%]	LEFT [%]	RIGHT [%]	UP [%]	DOWN [%]
Low	15	1000	0.003	0.003	0.736	0.012	0.009	0.786
Low	3	870	0.042	0.003	0.826	0.011	0.008	0.834
Low	4	750	0.004	0.003	0.719	0.011	0.009	0.722
Low	2	625	0.090	0.003	0.707	0.014	0.008	0.824
Low	5	500	0.005	0.003	0.642	0.013	0.011	0.755
Low	14	350	0.056	0.003	0.635	0.011	0.013	0.846
High	8	350	-0.012	0.002	0.864	0.017	0.013	0.833
High	1	225	0.006	0.002	0.846	0.015	0.015	0.834
High	12	*50*	0.025	0.003	0.814	0.016	0.018	0.720
High	13	50	0.026	0.003	0.832	0.020	0.014	0.763
Low	15 – stability	1000	0.004	0.003	0.735	0.012	0.007	0.814
High	15 – stability	1000	-0.003	0.002	0.942	0.012	0.008	0.827

Run II, Left/Right Physics Asymmetry		ToF Window : [-2 sigma : +2 sigma]					
		Dilution Asymmetry <DA>		Dilution Number <DN>			
Foil	Thickness [nm]	Asymmetry [%]	dAsym [%]	LEFT [%]	RIGHT [%]	UP [%]	DOWN [%]
15	1000	0.048	0.003	0.635	0.285	0.230	1.010
3	870	0.009	0.003	0.632	0.282	0.218	0.930
4	750	0.014	0.003	0.633	0.335	0.243	1.035
2	625	-0.039	0.002	0.549	0.254	0.202	0.910
5	500	0.008	0.003	0.555	0.338	0.256	1.037
14	350	0.003	0.003	0.494	0.287	0.233	0.953
8	350	0.053	0.003	0.545	0.304	0.223	0.974
1	225	0.013	0.003	0.523	0.312	0.243	1.027
12	*50*	0.020	0.003	0.412	0.287	0.221	0.926
13	50	0.030	0.003	0.373	0.254	0.192	0.847
15 – stability	1000	-0.017	0.002	0.592	0.300	0.232	1.017