linac_variations

<u>Inj_real_P</u> 122	<u>NL_real_P</u> 1052	<u>SL_real_P</u> 1052	<u>P^2_A1</u> 1	<u>P^2_B5</u> 0.994	<u>P^2_C5</u> 0.999	P_D(MeV/c) 11634	<u>scenario</u> hope
117	1042	1042	1	0.98	0.999	11521	best hope
123	1048	1055	1	0.985	0.976	11626	hope
123	1055	1048	1	0.994	0.998	11633	hope
118	1030	1057	1	1	0.993	11525	lose cavities in NL
105	1057	1030	1	0.999	0.98	11539	lose cavities in SL
123	1050	1030	1	0.977	1	11515	
124	1050	1030	1	0.992	0.998	11516	
126	1030	1030	1	0.955	0.996	11399	lose in both
120	1000	1000	1	0.864	0.884	11070	lost lots in both

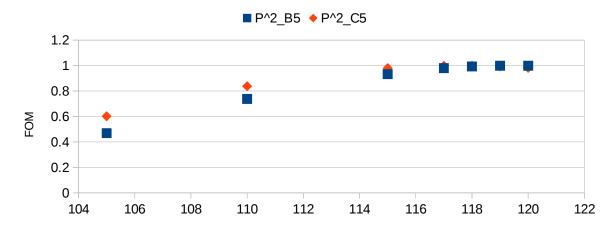
bold: problematic

real_P	real momentum,	as opposed to e	DT/lem setting

- P^2 polarization squared figure of merit
- A1 first pass to A, parity experiment
- B5, C5 fifth pass to B, C
- P_D(MeV/c) momentum to hall D

highlighted variation would have about 32 MeV headroom per linac if all modules perform as hoped

P^2 vs injector P plotted below, showing that setup at nominal (eDT) of 117.3/1039.4/1039.4 would likely allow injectror change only (real linac momentum will be ~1042 MeV in this case)



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