

The magic ring

S.Martin

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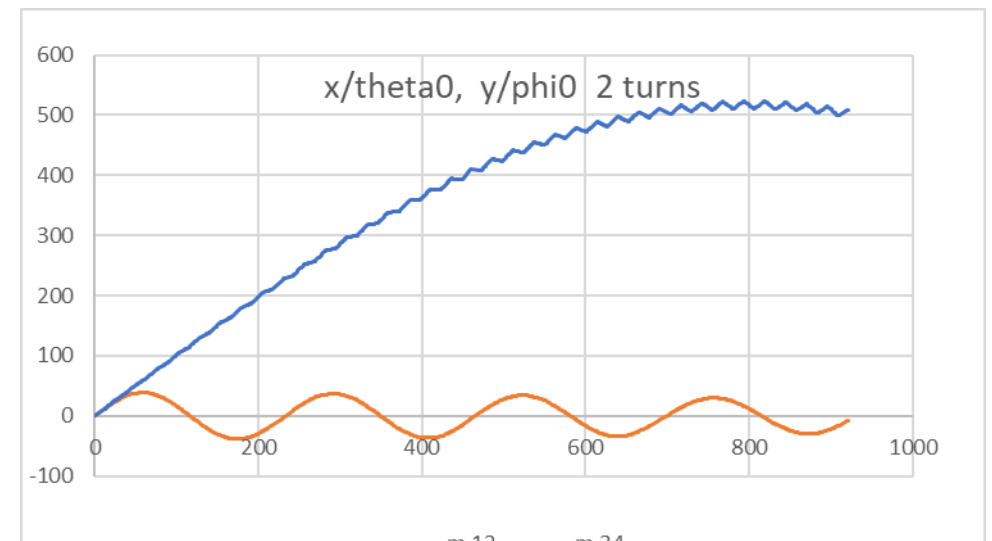
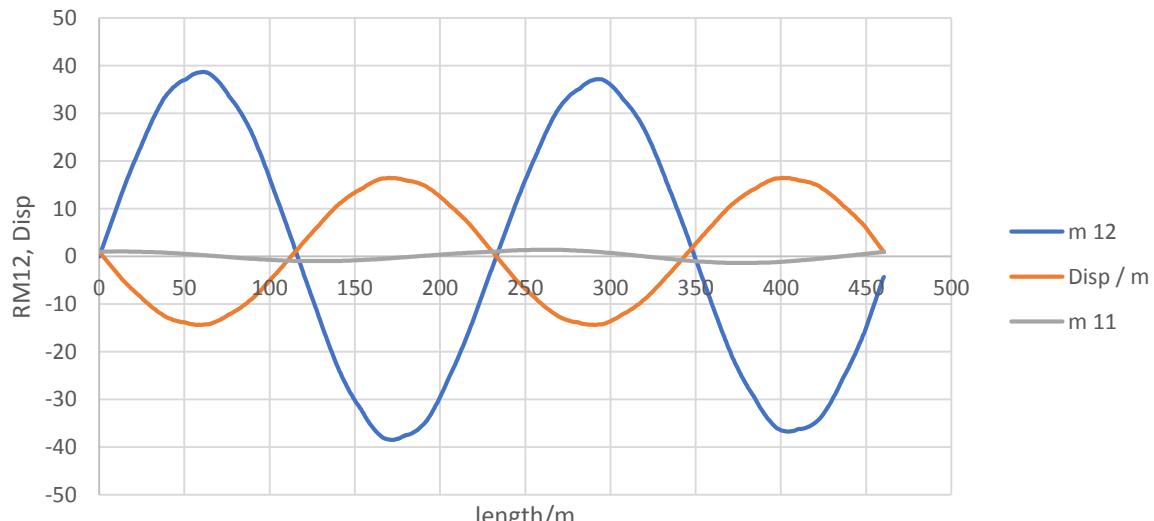
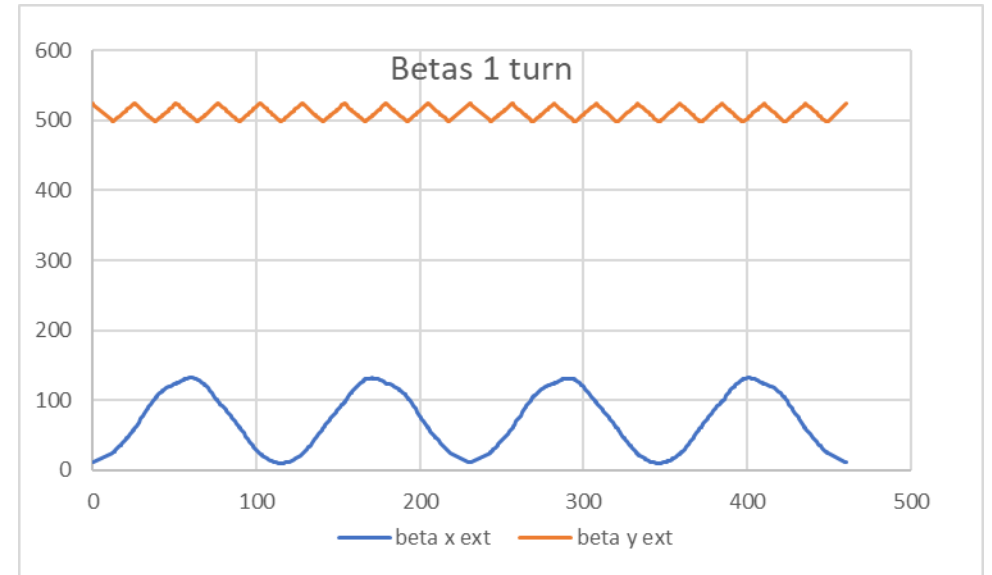
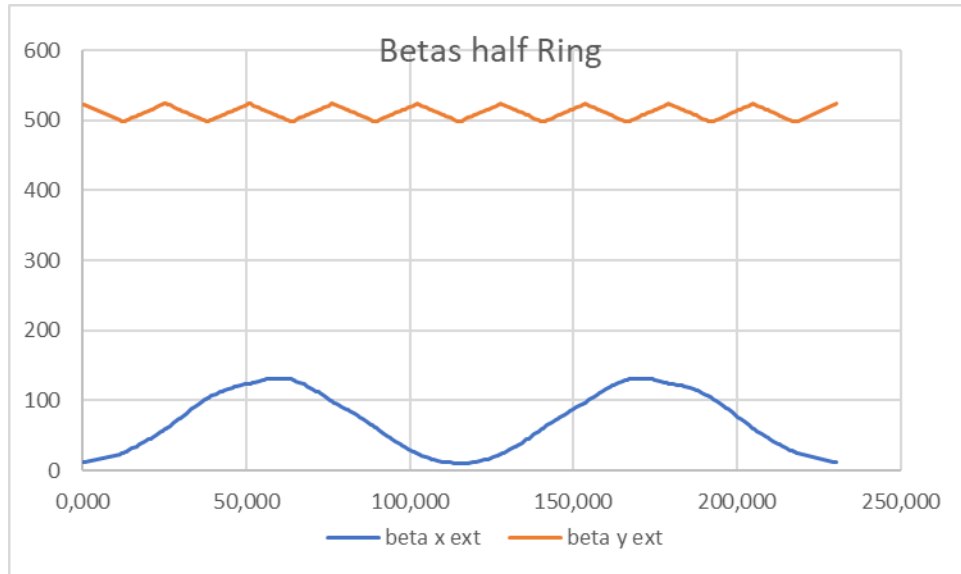
Lebedev ring Lattice Data

	weak	strong		beta_kin	0.5984
Energy	232.79	232.79MeV		cp	700.74MeV/c
N	14	14		Brho	2.3374Tm
C	263	300		gamma kin	1.2481
Focusing k in bends	0.199	01/m		Arc structure	7*(F-B-B-B-D-B-B-B-F)-- -----
Tune Qx	1.229	2.32		E field	10MV/m
Tune Qy	0.456	0.31		length plate	2.7443m
Beta x max	34	29.1m		Tan delta	0.0654
Beta y max	91.7	204m		delta	0.0654Rad
Diespersion	45.5	17.35m		delta/2	0.0327
dP/P max	0.0003	0.0009+-		No Defl	96.0000
dP/P rms	0.0001	0.0003		Dist defl	1m
acceptance x norm	5	5.8mm mrad		length def tot	3.7443m
eps x norm	0.56	0.31mm mrad		No Quads	
eps y norm	1.52	2.2mm mrad		length Quad	0.8m
rev. Frequency	682.1	597.3KHz		Dist Quad	0.8000m
mom. Comp. Alpha	1.785	0.51		length quad tot	1.6000m
Frequency slip eta	1.144	-0.132		Dist F D center	12.8330m
Transition		376MeV			

HF			
	4.97*10-		
Bucket height	4	1.3*10-3	
Harm. Number	70	70	
Qsynchrotron	0.002	0.006	
RF Ampl. V0	13	10KV	
f RF	47.75	41.81MHz	
Bucket length	3.75	4.3m	
Bunch length	27	31m	

Lebedev ring: Lattice functions

$Q_x=1.9, Q_y=0.1$



To Do

- Andreas Spin tracking
- Martin Runge – Kutta (very high quality)
- Sig RF, live time, system design
- Helmut Field calculation, Rogovski Pick ups
- Kyril, Achim e-Bends
- Ed, Erakli Polarimeter
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