OSC Update

- Although 3rd harmonic is significant off-axis at lens, it is greatly suppressed when focused (factor of 20 or more) – different phases at different azimuthal angles cancel

- Working with Vardan on proper propagation of broader peaks – things appear to work so far...

Compare Different Harmonics (Use 1 Period, Assume Ideal Frequency)

	X-field (V/m)	Y-field (V/m)
1st harmonic	57.6456	59.0439
3rd harmonic	3.33656	3.41202
3rd harmonic (1 radian of azimuthal angles)	22.8521	30.0411

Compare Different Harmonics (Use 6 Periods, Integrate over Actual Frequencies)

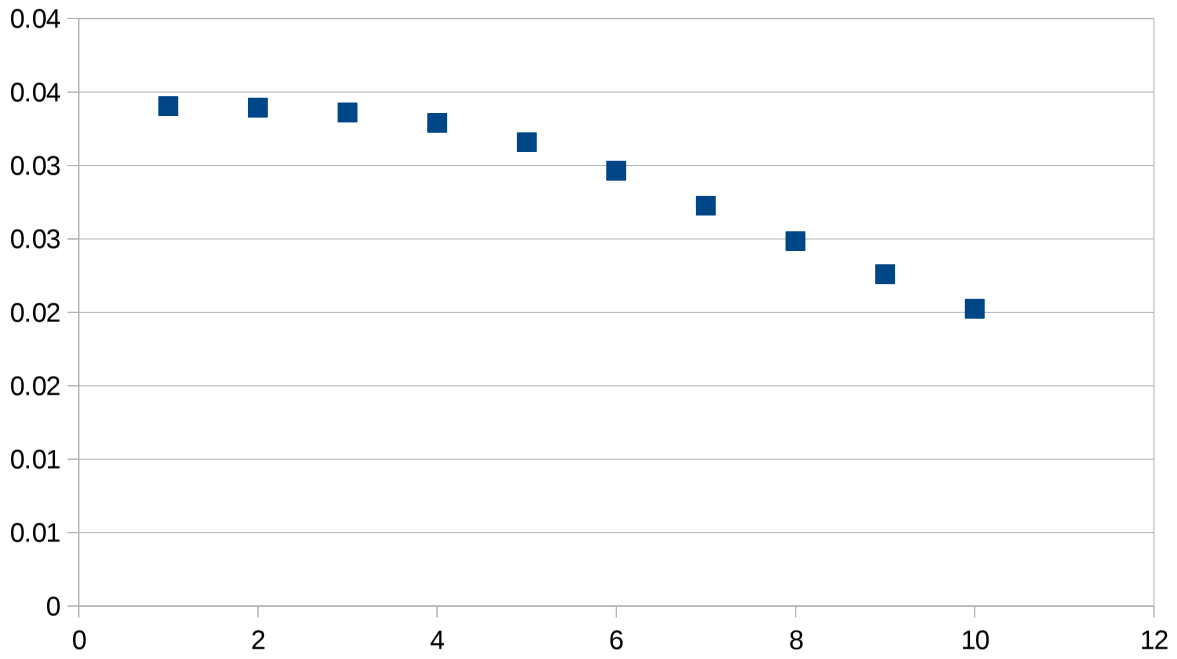
	X-field (V/m)	Y-field (V/m)
1st harmonic	60.8749	60.5498
3rd harmonic	0.556236	0.935592
3rd harmonic (1 radian of azimuthal angles)	25.4784	28.6574

Sloppy Models Update

- Found a synchrotron lattice
- Beginning work on creating Hessian for orbit

Backup Slides

Estimated Energy Transfer/Pd (eV) vs Number of Periods (Assume Ideal Frequency)



Estimated Energy Transfer/Pd (eV) vs Number of Periods (Integrate over Actual Frequencies)