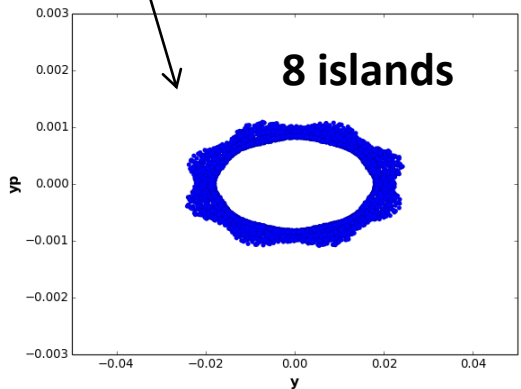
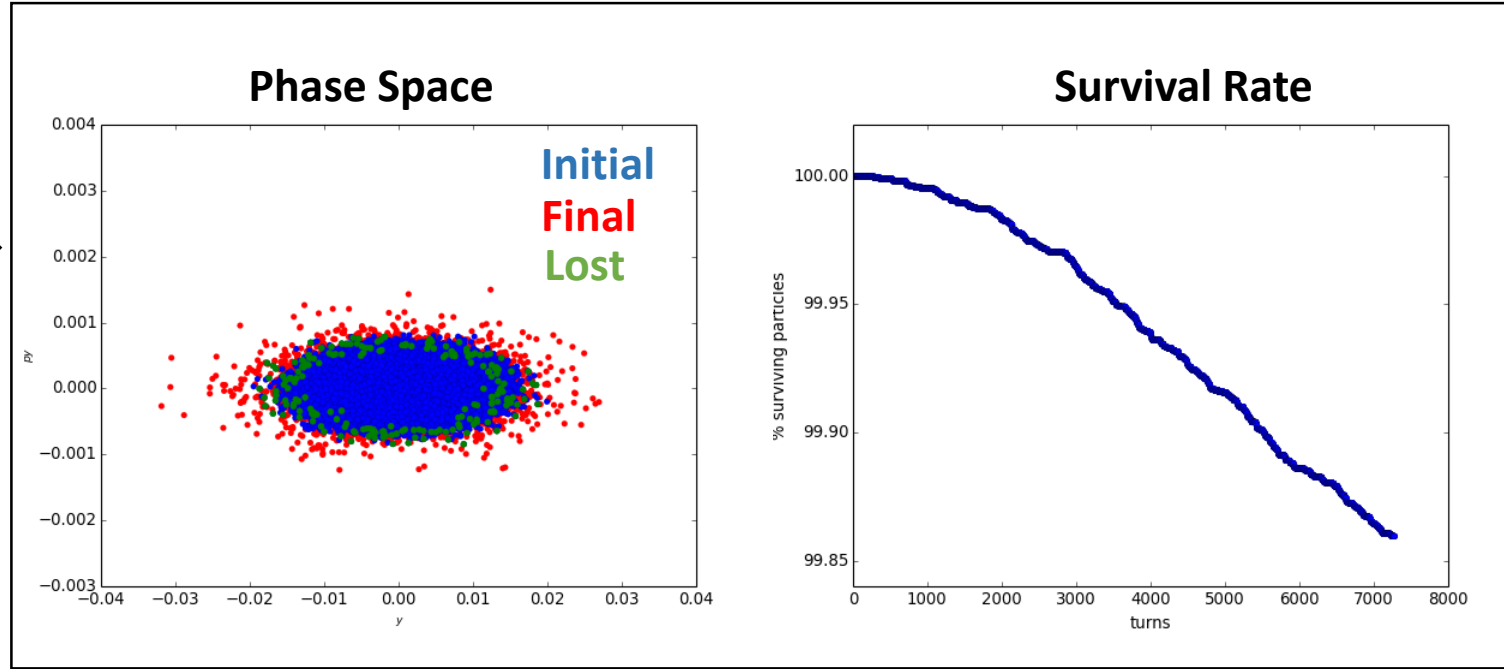
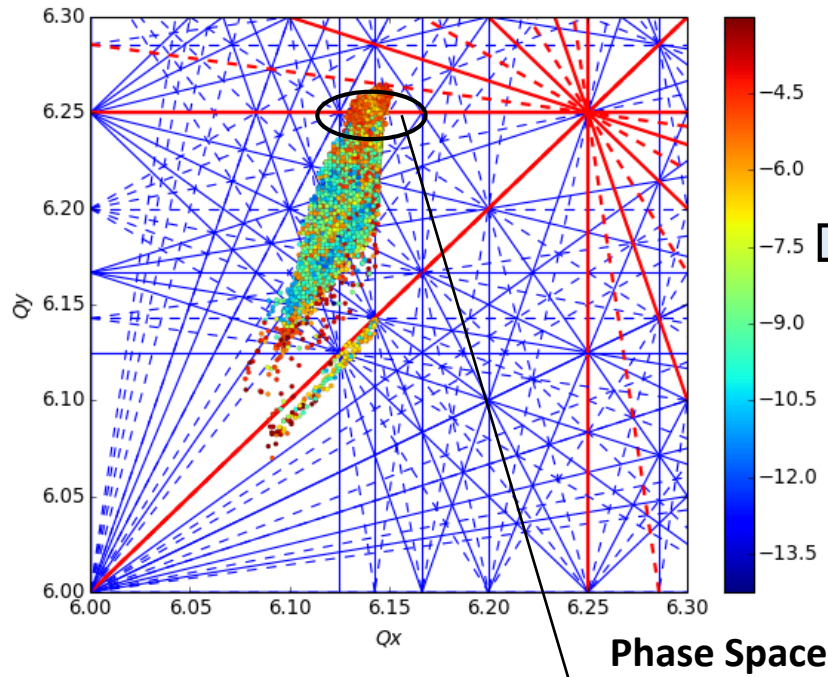


Space charge driven 8th order structural resonance



- Frequency map analysis with space charge for on and off momentum particles clearly show the 8th order structural resonance observed by R.Wasef et.al
- Association of the resonance with losses, halo effect and emittance growth

PS configured for LHC 25ns beam
 Working Point: $Q_x = 6.18, Q_y = 6.28$
 PS lattice without any non-linearities
 Simulations in PyOrbit under Space charge