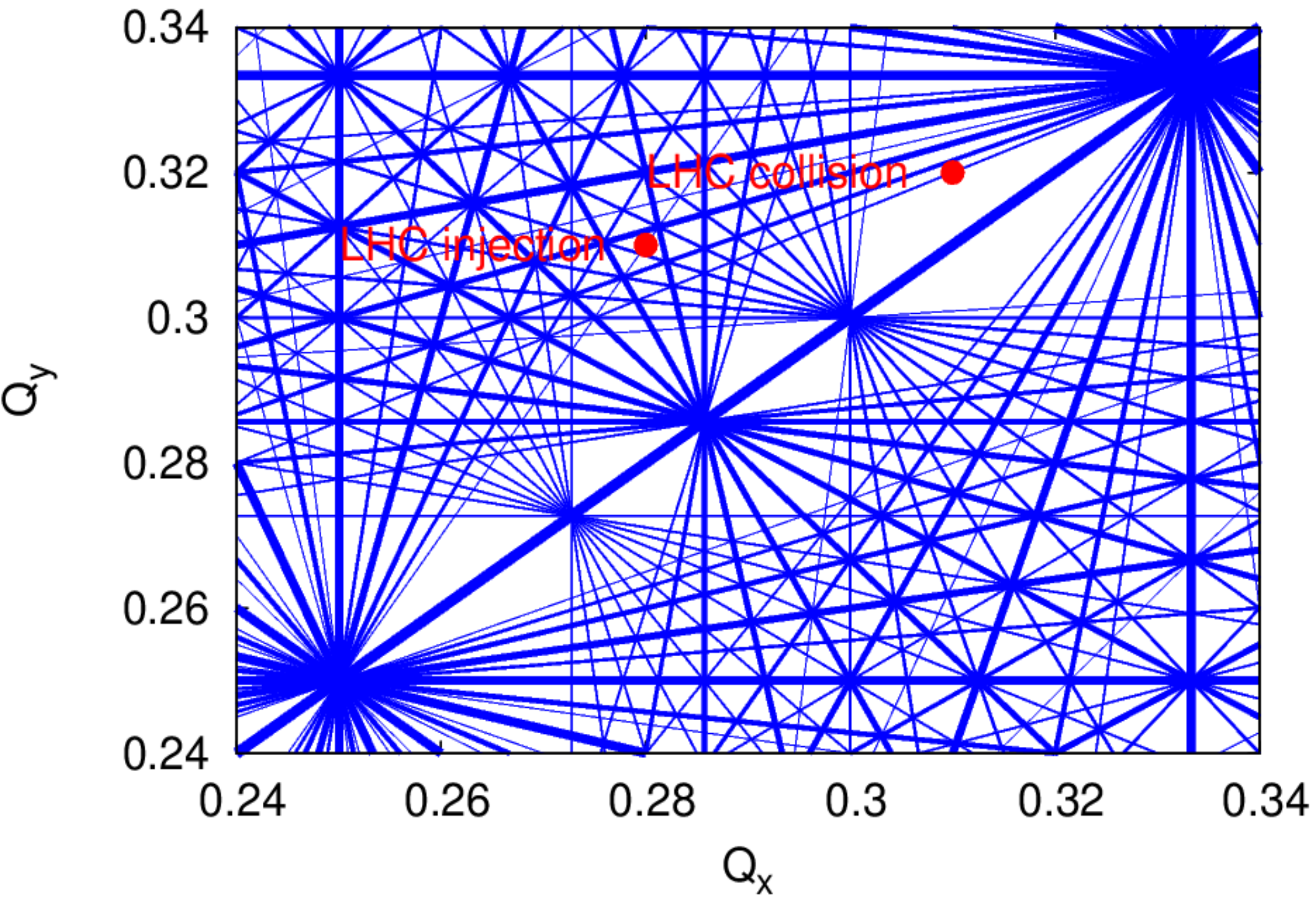
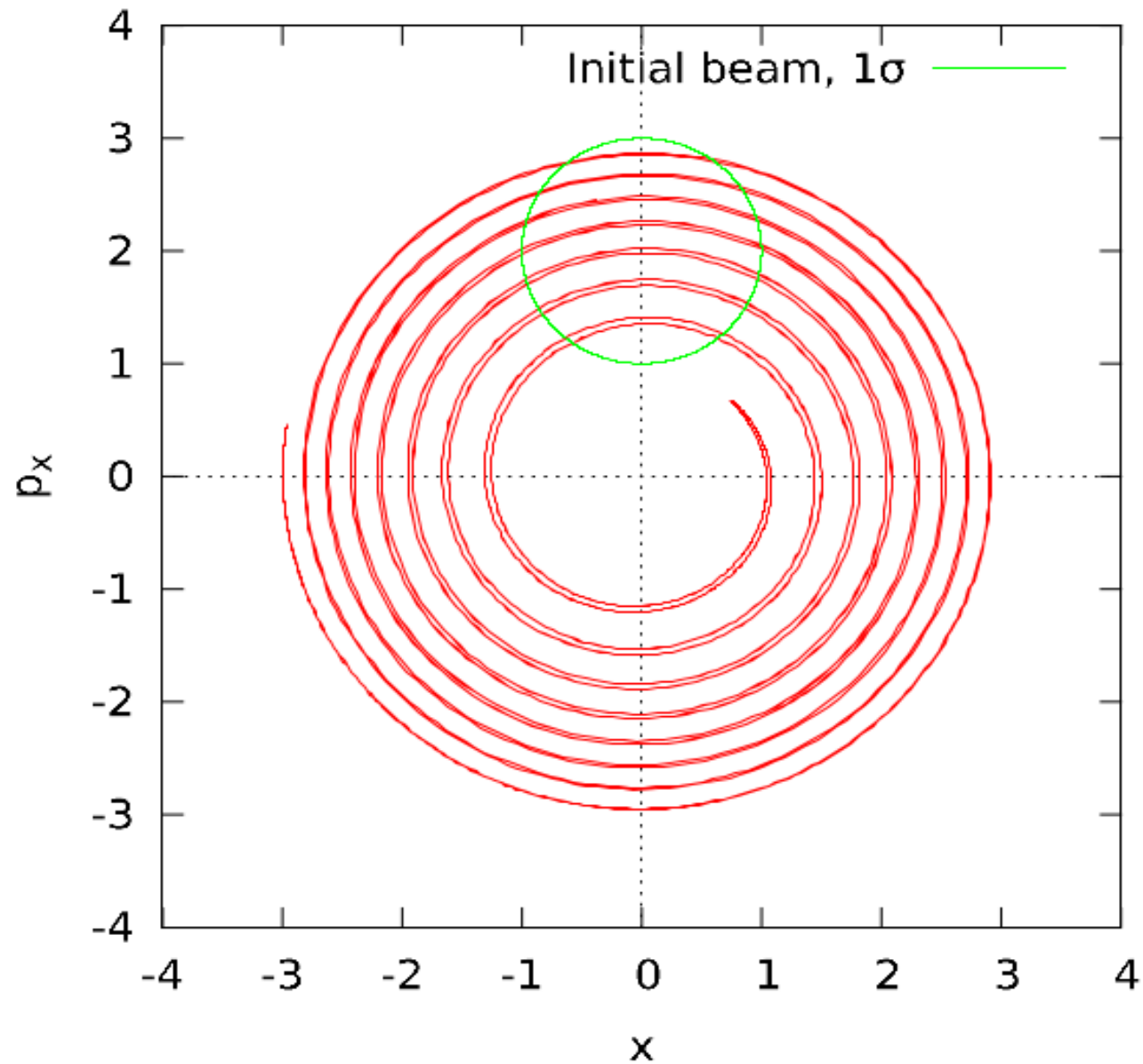


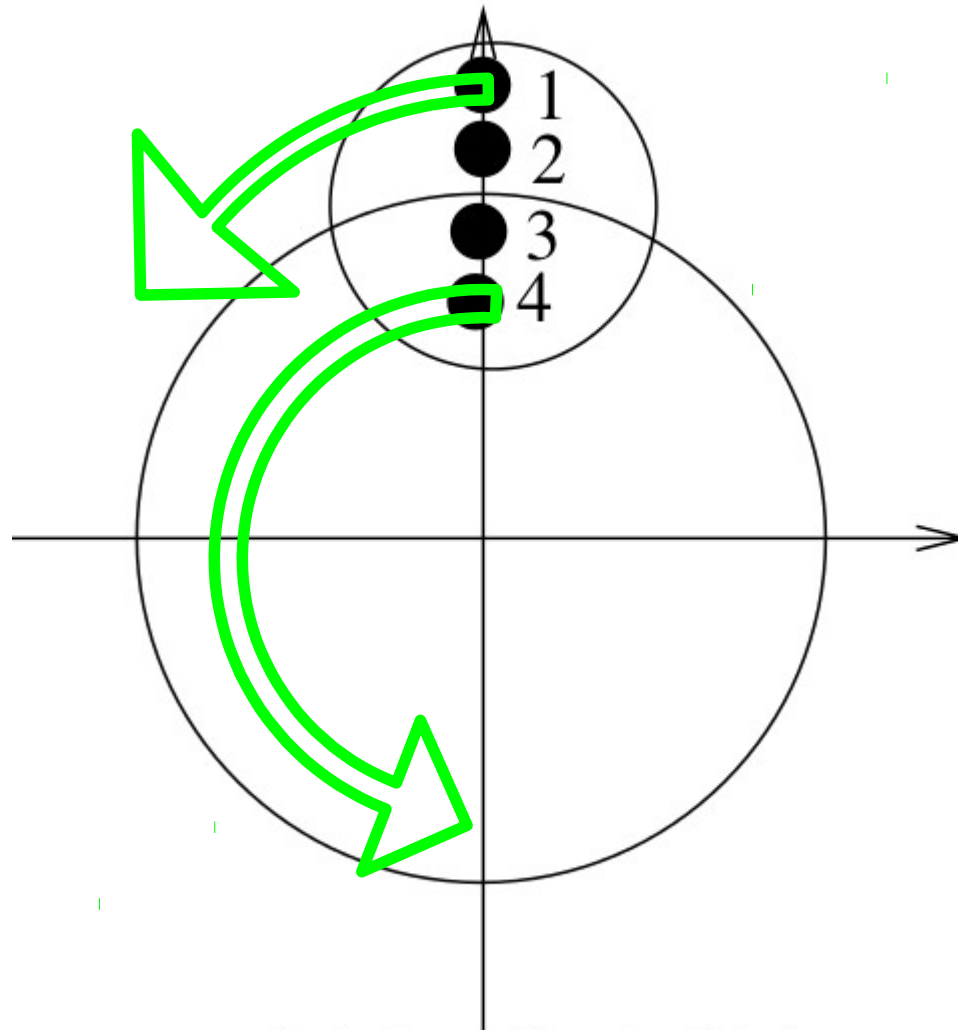
# LHC tunes



# Can we restore coherence?

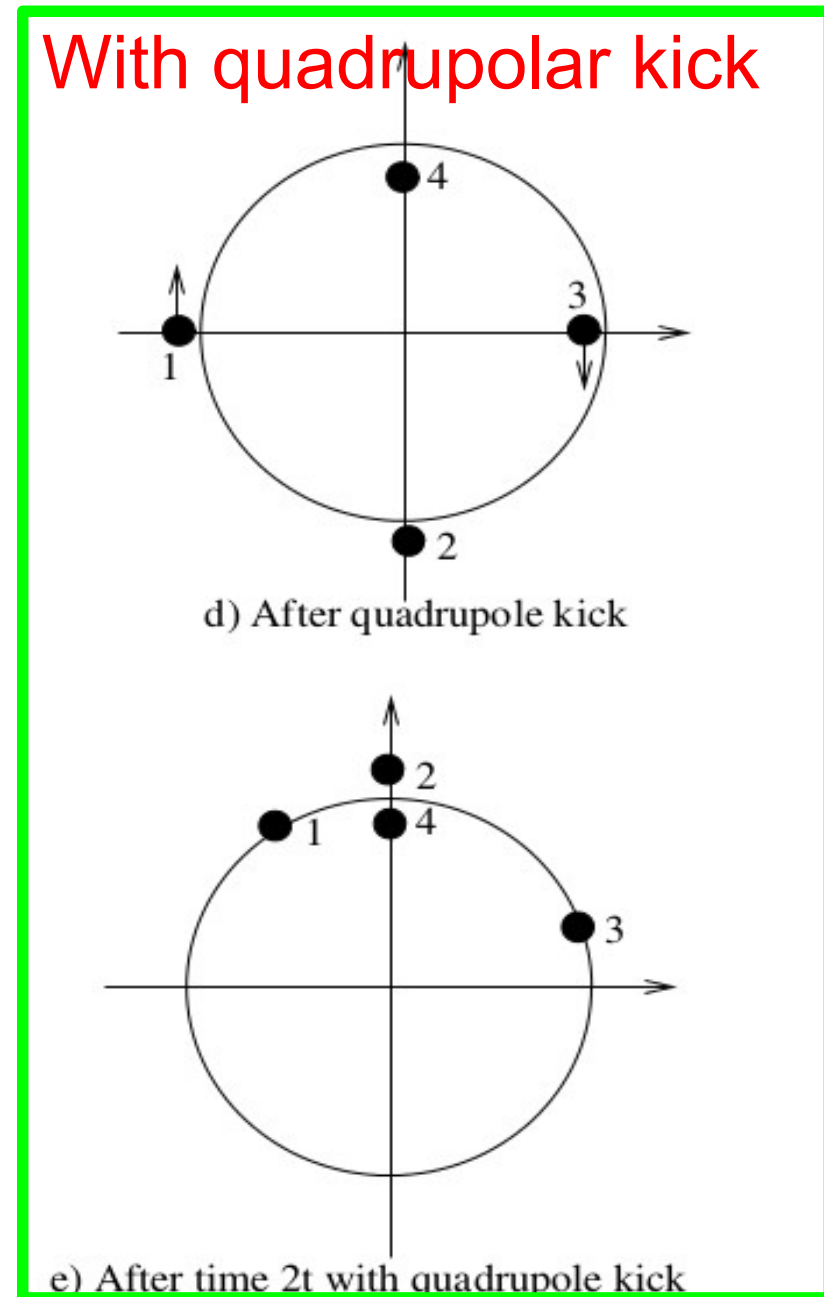
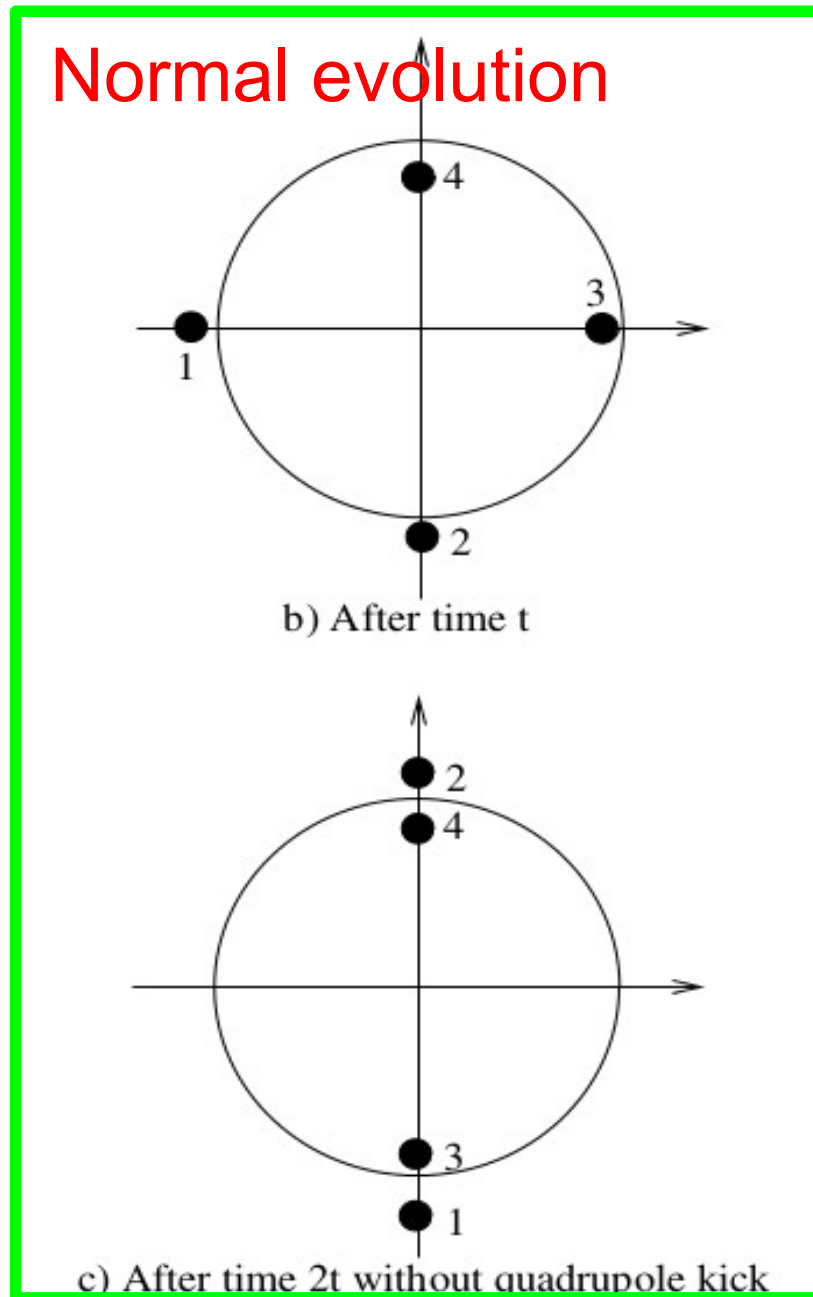


# Can we restore coherence?



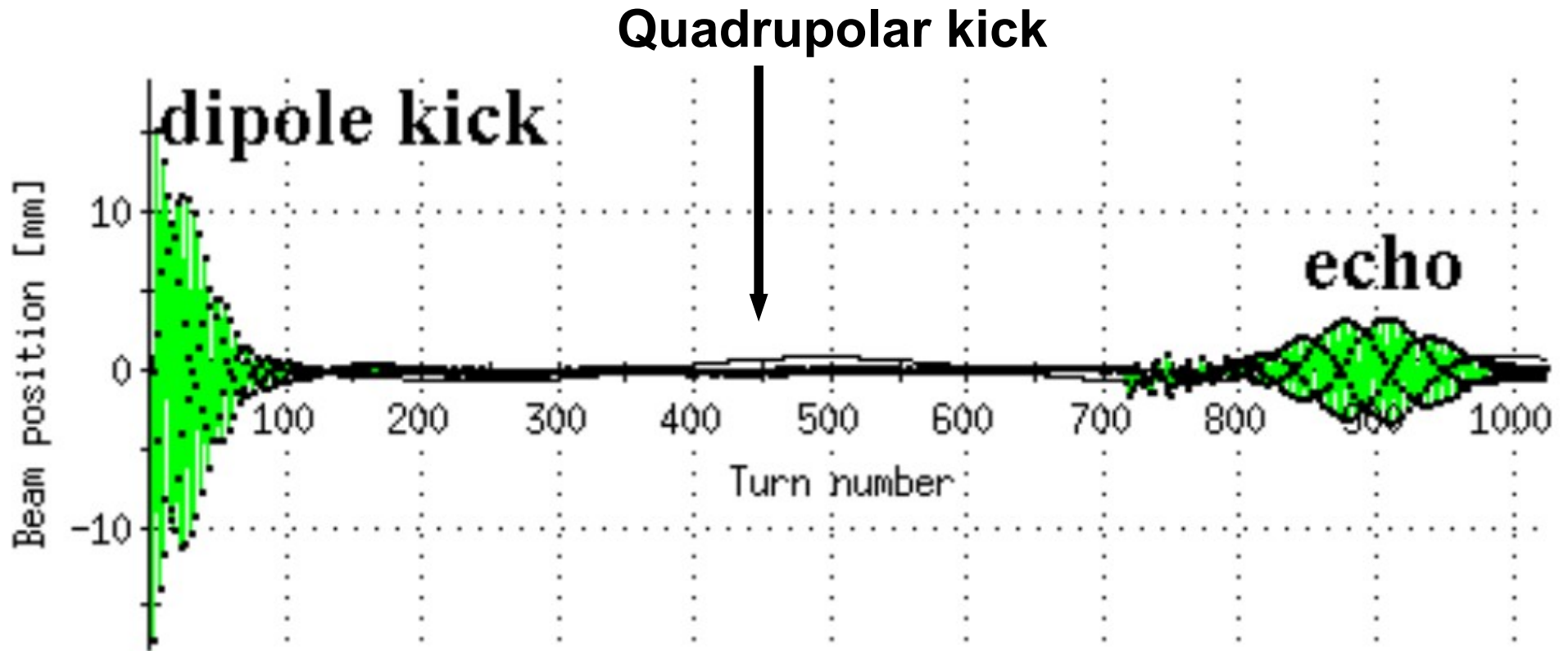
a) After dipole kick

# Partly yes, with a quadrupolar kick



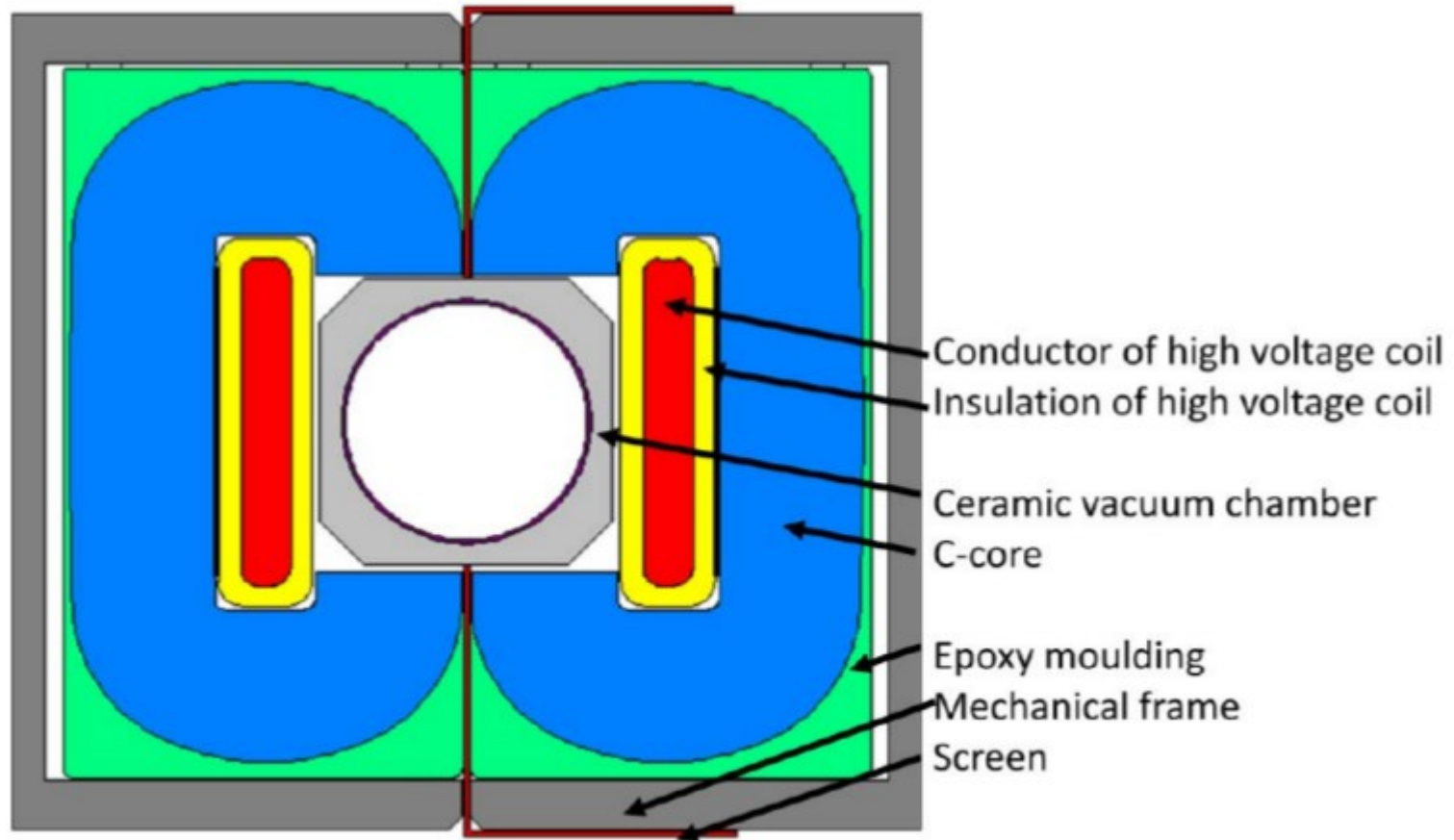
# The resulting re-cohered motion

*(ok, only shortly re-cohered)*



Ref: W. Fischer et al, Measurement of transverse echoes in RHIC, PAC 2005

# What magnet is an AC dipole and what is the field?



- In LHC: a kicker magnet (dipole) powered with audio amplifiers (freq  $\sim 3$  kHz)
- Maximum field  $\sim 0.01$  T