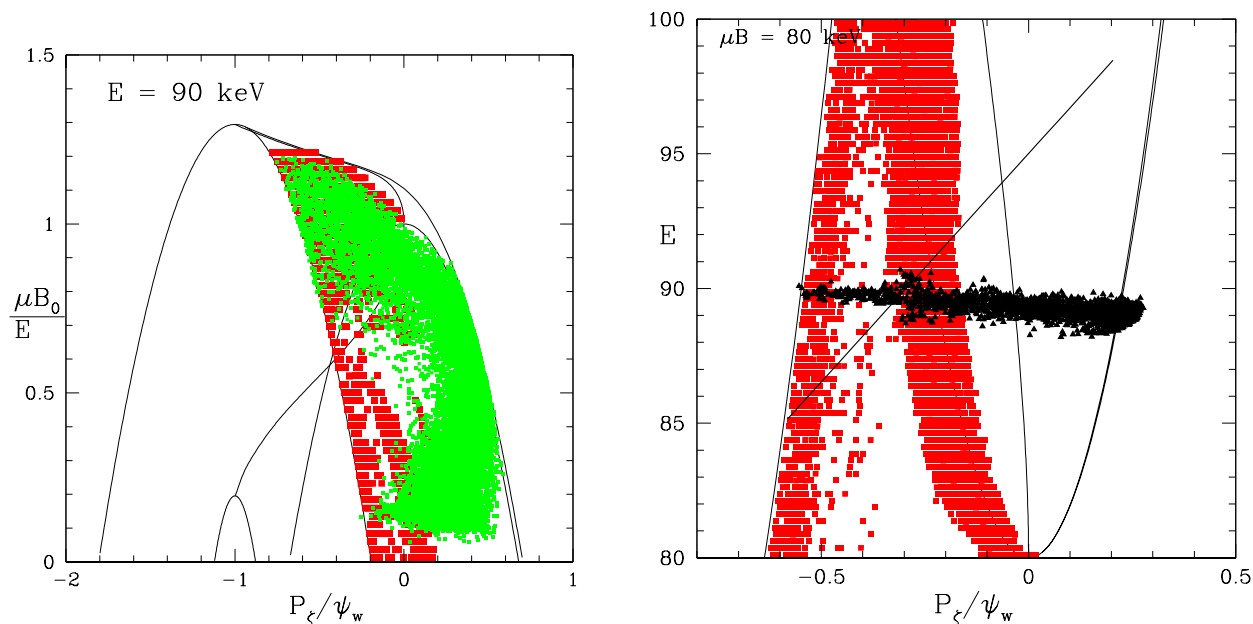


**A new routine in the guiding center code Orbit
can show stochastic domains for particle transport
produced by TAE and other modes**

Red domains contain resonances allowing transport.
For fixed energy of 90 Kev the beam particles (green)
have access to loss only for small or large μ , not intermediate.
Passing particle domain in P_ζ , E for fixed μ shows line of possible motion
due to the mode. Black points are the initial beam as given by TRANSP



**Mode induced lost particles predicted by Orbit
are mapped using values of E , P_ζ , μ to intersection
with the lost particle detector.**

TAE avalanche in NSTX, shot 141719
Black - all lost particles, Red - Hit detector,
Green line - Trapped Passing boundary

