## A new routine in the guiding center code Orbit

 can show stochastic domains for particle transport produced by TAE and other modesed domains contain resonances allowing transport.
or fixed energy of 90 Kev the beam particles (green)
ave access to loss only for small or large $\mu$, not intermediate. assing particle domain in $P_{\zeta}$, E for fixed $\mu$ shows line of possible motion ue 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 $E, P_{\zeta}, \mu$ to intersection with the lost particle detector.

AE avalanche in NSTX, shot 141719
lack - all lost particles, Red - Hit detector, reen line - Trapped Passing boundary


