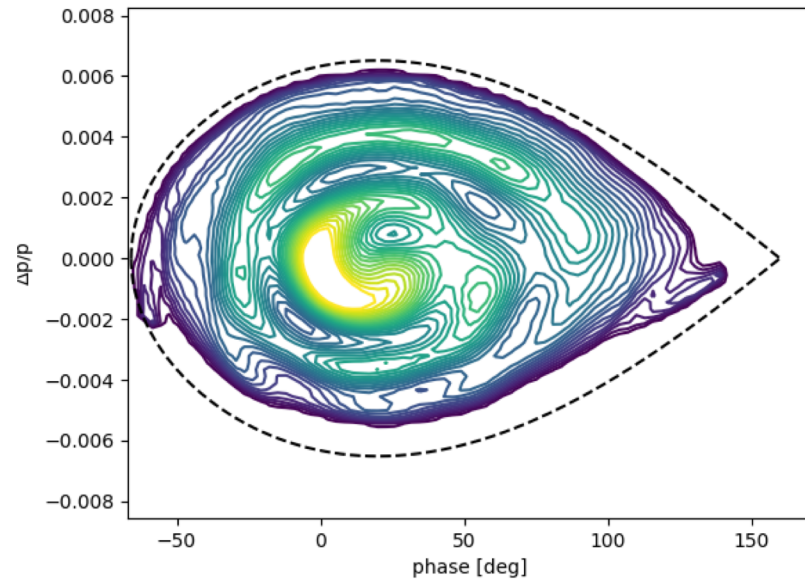


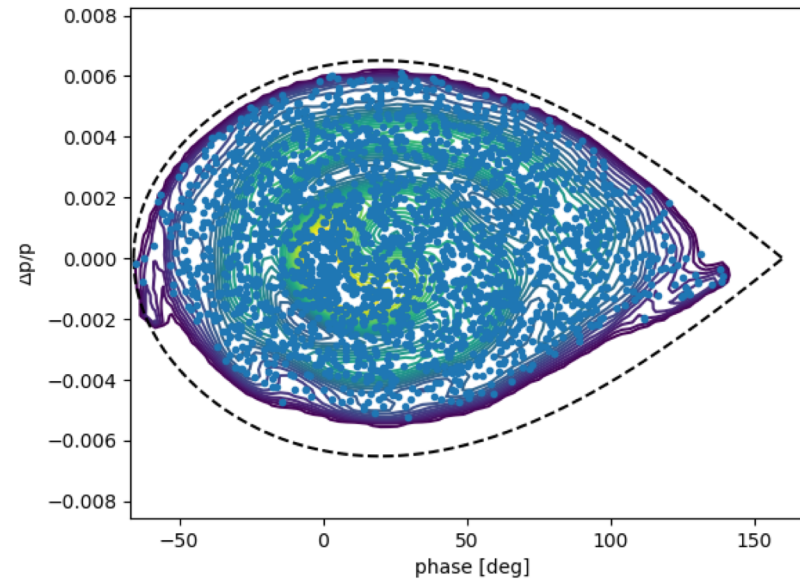
# Adiabaticity experiment update

D. Kelliher, 15/10/2020

# Sampling the tomography distribution



Tomography result  $f(\phi, \delta)$

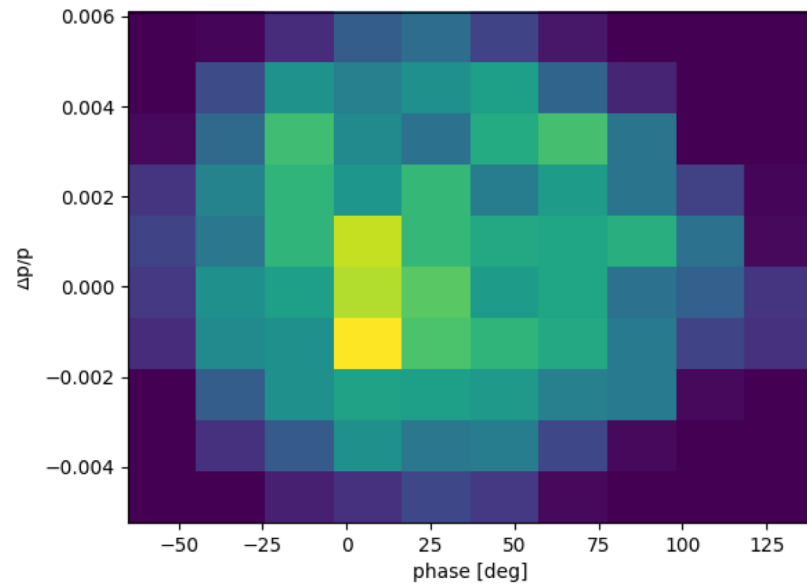


Sample  $(\phi, \delta)$  distribution from  $f(\phi, \delta)$ .

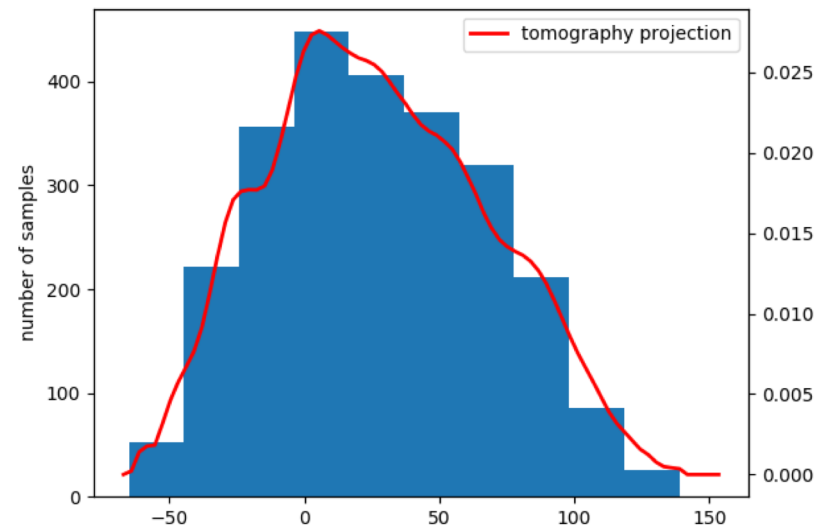
- Create a distribution based on the tomography result.
- Use python version of Matlab “pinky” module – allows an arbitrary 2d probability distribution to be sampled.

<https://github.com/pgromano/pinky>

# Sampling the tomography distribution



2d histogram of sampled distribution.



1d histogram (phase) of sampled distribution.

Track this distribution in PyHEADTAIL and calculate emittance growth for various ramp rates.