## (EX/P4-30) 3-D divertor footprints can be either shielded or amplified by plasma response depending on pitch alignment





NSTX-U

- Continuous rotation of n=1 fields to scan phase shift between top and middle row of coils
- Edge normal fields from vacuum and ideal plasma response → shielding (resonant components) or amplification (non-resonant components) of applied 3-D fields depending on phase shift
- Stronger peak heat flux and strike point splitting for more resonant phase shift, due to amplification effect

Net effect of 3-D fields on divertor footprints is determined by competition between shielding of resonant fields and amplification of non-resonant fields