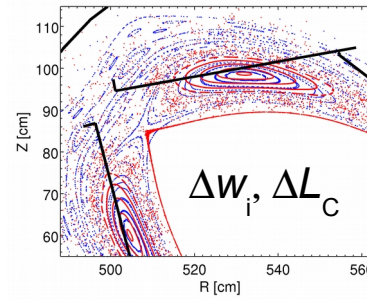
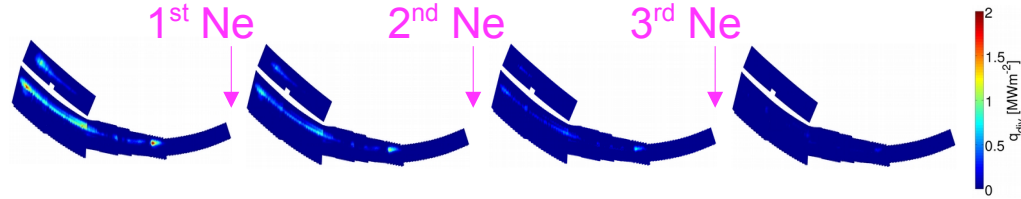


Demonstration of Power Exhaust Control by Impurity Seeding in the Island Divertor of Wendelstein 7-X

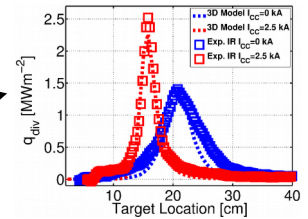


- stable high radiation scenarios with $f_{\text{rad}} = 70\%$ -
80% and mostly uniformly reduced q_{div} and Γ_{div}
- Ne: effective radiator, high recycling
- N₂: low recycling, better neutral compression
- Island geometry: an additional actuator for
power exhaust control

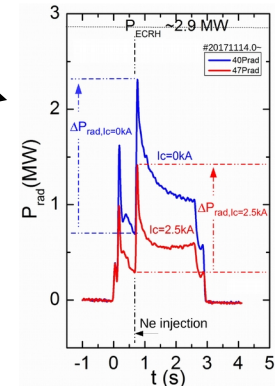
Divertor heat fluxes #20180920.042



power
flux



radiative
power



Impurity seeding combined with manipulation of island geometry promising for power exhaust control in high-performance divertor scenarios at W7-X