

# H-mode pedestal measurements in NSTX

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## Pedestal characterization

- Present diagnostics: MPTS, CHERS (core and edge), 1-D CCD camera - neutral and impurity profiles at LCFS
- Need to study pedestal width and height dependence on  $B_p, T_e, T_i, A$
- Edge localized modes
- In / out pedestal asymmetry
- HHFW and NBI heated H-mode plasmas

## Proposed pedestal diagnostic

- High resolution filtered AXUV photodiode arrays with tangential views at inboard and outboard pedestal region
- Metal foil filter (e.g. Ti) - measure C V, C VI profiles  
 $R = 125 - 150 \text{ cm}, T_e < 300 - 500 \text{ eV}, n_e < 3 \times 10^{13} \text{ cm}^{-3}$
- Interference FUV filter - measure C IV profile  
 $R = 140 - 160 \text{ cm}$