No-plasma measurements of neutral leakage paths in NSTX

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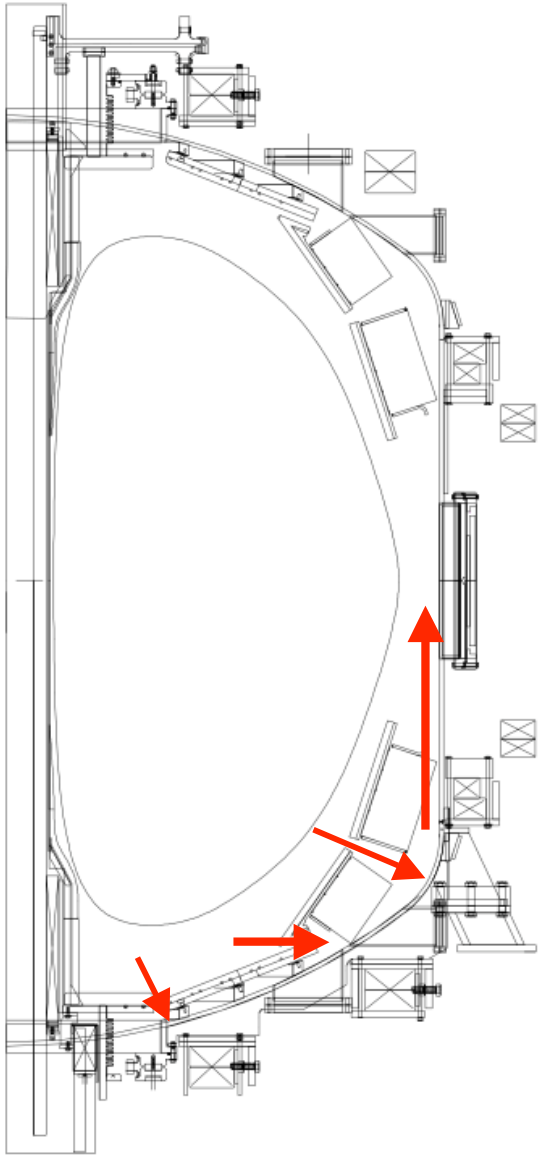
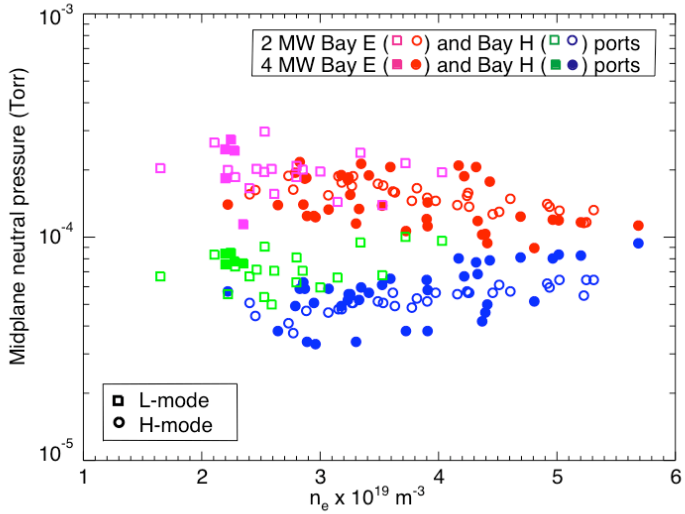
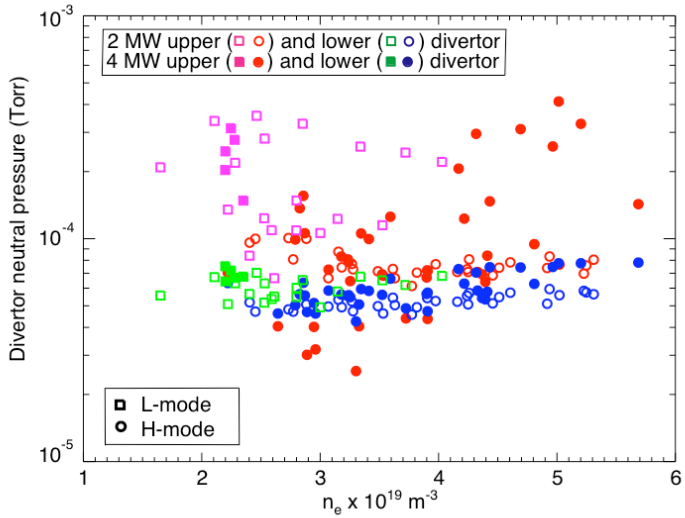
N. pressure does not / weakly depends on density







Neutral gas leakage paths

- Source of neutral pressure: recombination & leaks
- Need to understand neutral gas leaks inside v. vessel
  - for SOL transport interpretation
  - for performance optimization
- Puzzling n. pressure behavior
- Conductance under divertor plates low
- Conductunce under passive plates high

- Puff gas w/o plasma - measure n. pressure in various locations - infer gas conductances
- Attempt to model with DEGAS2
- Compare n. pressure response with and w/o plasma for same gas injection scenarios

Low conductance through BBQ grills under divertor plates