

Cross-cutting MHD/Boundary Physics Issues for Next Steps

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MHD/Boundary Issues

- density control needed
 - in-vessel pump can only be optimized for a single shape
 - need one pump per divertor? -> SN vs DN decision
- density profile control desired (needed?)
 - pellets more effective from HFS -> center stack design
 - compact toroid fueling requirements?
- impurity control needed for long pulse, high power shots
 - edge tearing modes - impurity related?
 - wall may need higher thermal conductivity material
 - > wall tile thickness important, sets minimum aspect ratio?

Continuous Density Rise in Long Pulse, High Performance Discharges

