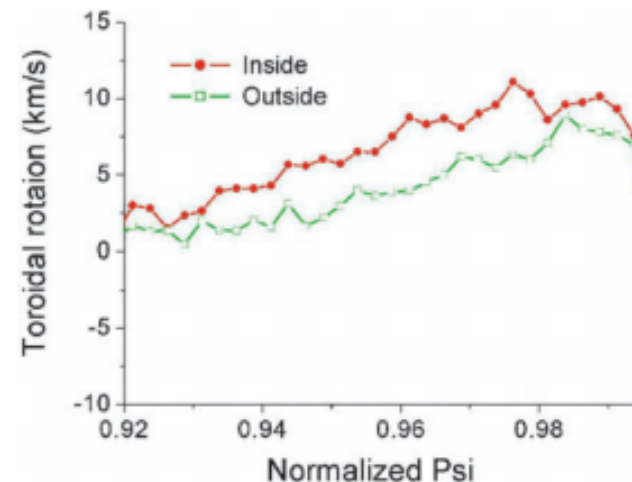


Effect of poloidal variation of gas fueling on H-mode access and sustainment

- H-mode access on ST's easier with HFS gas fueling.
- **Goal: Understand using XGC0 simulations, varying the poloidal fueling location**
- Previous work found change in toroidal rotation and ExB shear for LFS vs HFS fueling locations [Maingi PPCF 2004].



Plan

- This proposal focuses on expanding type of injectors used (shoulder injectors, SGI, etc.). Will further test variation with poloidal location and penetration of gas.
- Experiments already proposed to vary gas fueling location, optimize H-mode scenarios [Battaglia]. Operate in piggy-back as much as possible.