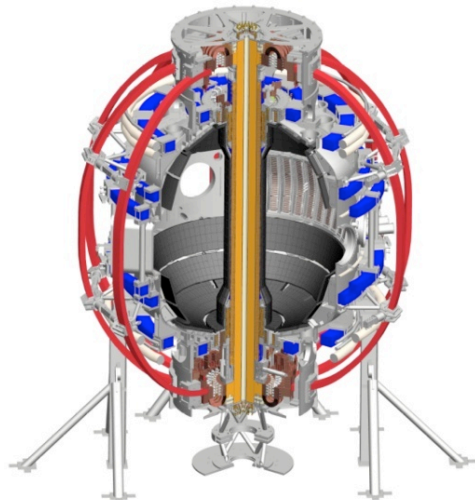


Pedestal Structure & Control TSG

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Early Ops H-mode pedestal studies

Recall

- R-15: Characterize the H-Mode pedestal structure at increased B_T , I_p , and NBI heating power
- Identify the underlying mechanisms controlling the pedestal structure
- Develop and assess the snowflake divertor configuration and edge properties in NSTX-U IR(15-1)

Attempt to exploit the change in wall conditioning (boronization -- > lithium) to add to the pedestal characterization

- Facility capabilities
 - RWM coils; boronization (and later lithium); standard core fuelling
- Diagnostics to be commissioned
 - 42-Channel MPTS, CHERS, filterscopes, tangential ME-SXR, BES, Up & Down SXR, Reflectometer, tangential bolometer, magnetics for EFIT reconstruction, LADA in bolometer mode, MSE.
- Useful machine parameters
 - $I_p = 0.5 - 1.5$ MA, $B_t = 0.5 - 0.75$ T, $P_{NBI} = 4 - 12$ MW, $0.3 < \delta < 0.8$
- We propose to co-lead experiments to re-establish long H-mode, and the controlled introduction of lithium into NSTX-U
- Analysis tools
 - Python tools shake-down!