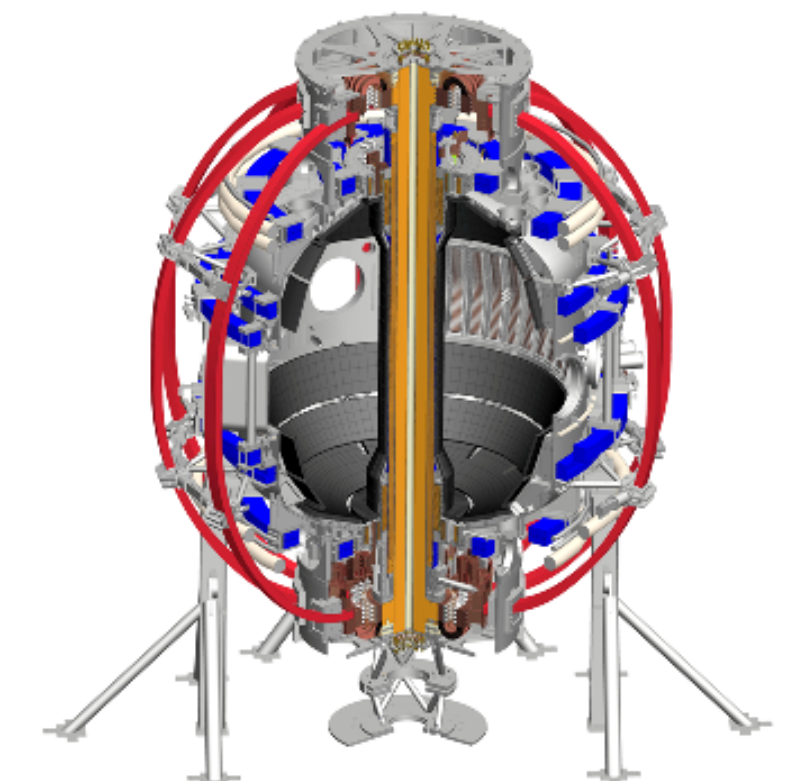


# PED TSG: Polar region changes impact on Pedestal experiments

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- The TSG-PED has identified key requirements to insure productive pedestal experiments on NSTX-U.
- The parameters **not** mentioned here are **not** strict requirements for anticipated pedestal experiments.

# Flat top duration

- A flat top of 1.5 - 2 s is found to be necessary.
- Choice is dictated by:
  - estimated increase in confinement time to 100 ms
  - The Thomson temporal resolution of 60 - 90 Hz (in routine operation)
  - Anticipated type ELM frequency ranging for 5 - 75 Hz over the range of plasma parameters.

**To capture the inter-ELM dynamics, and to capture the profiles for stability analysis, we require a flat top of 1.5 - 2 s.**

# Shape and Magnetic field constraints

- Experiments overall will need the full triangularity range capability (0.3-0.7).
- However, we are open to sweep the strike point in over 1.5 s flattop.
  - We do not require fixed kappa during our triangularity scans.
- The full magnetic field strength is also required for I- and H-mode experiments
- Anticipated experiments require a mix of magnetic geometries
  - I-mode experiments require USN configuration, and LGI and Li wall conditioning experiments may require DN configuration.