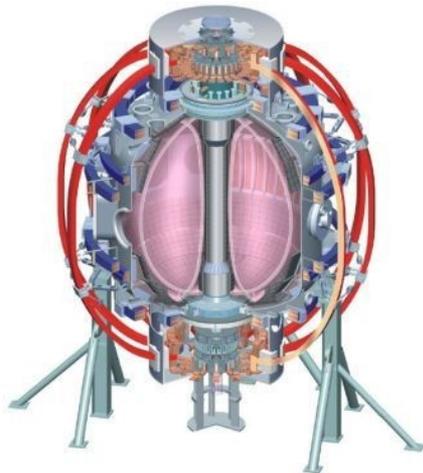


SOL modifications due to 3D fields and evaluation of baffle-probes for cross-field transport monitoring

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LSB-318 – 1:30-5:30pm, March 17, 2011



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3D fields expected to increase pump-out of the pedestal – could have unintended consequences for the divertor

- 3D fields will be used to attempt control of the pedestal via pump-out
- However, pump-out could result in increased heat and particle loading of the divertor, possibly requiring further mitigation techniques
- XP would utilize HDLP to diagnose change in target plasma parameters as a result of 3D field application (medium triangularity)
- XP would further utilize OEDGE empirical plasma reconstructions to evaluate cross-field transport terms in the SOL to determine if this is altered as well
- XP would further evaluate the mid-plane baffle probes to determine if they are operating in a regime in which they are detecting anomalous cross-field transport

