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XP proposal (XP1018) : Error Field Threshold Study with Reduced Input torques (Piggyback on XP1151)

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MS TSG Group Review
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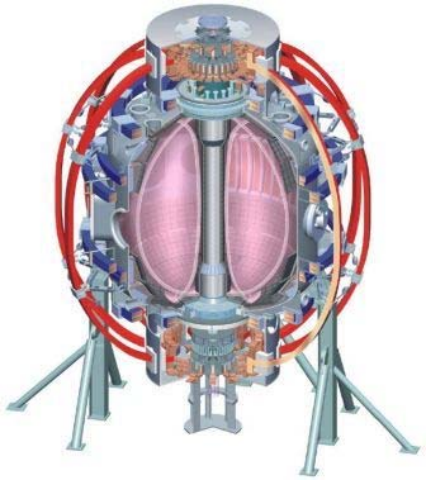
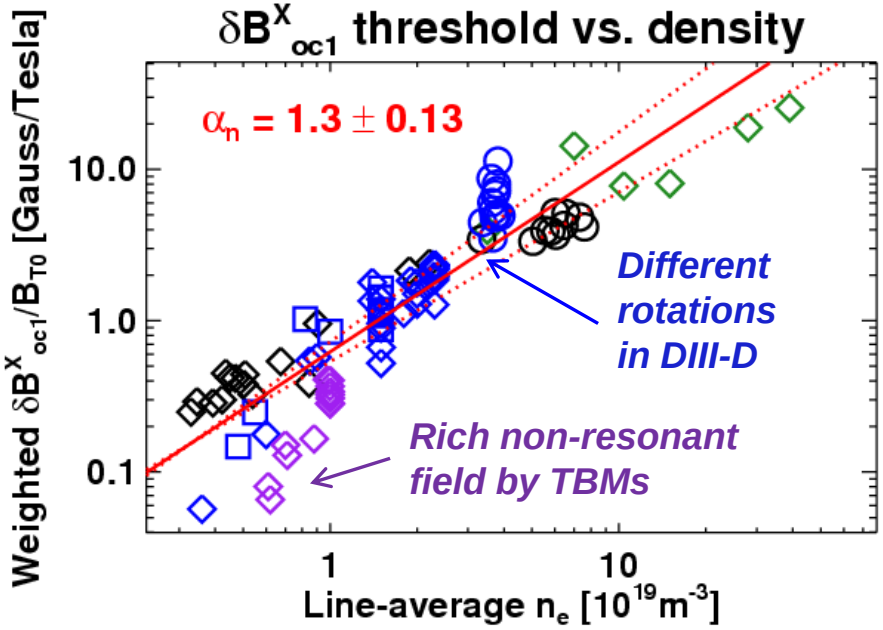


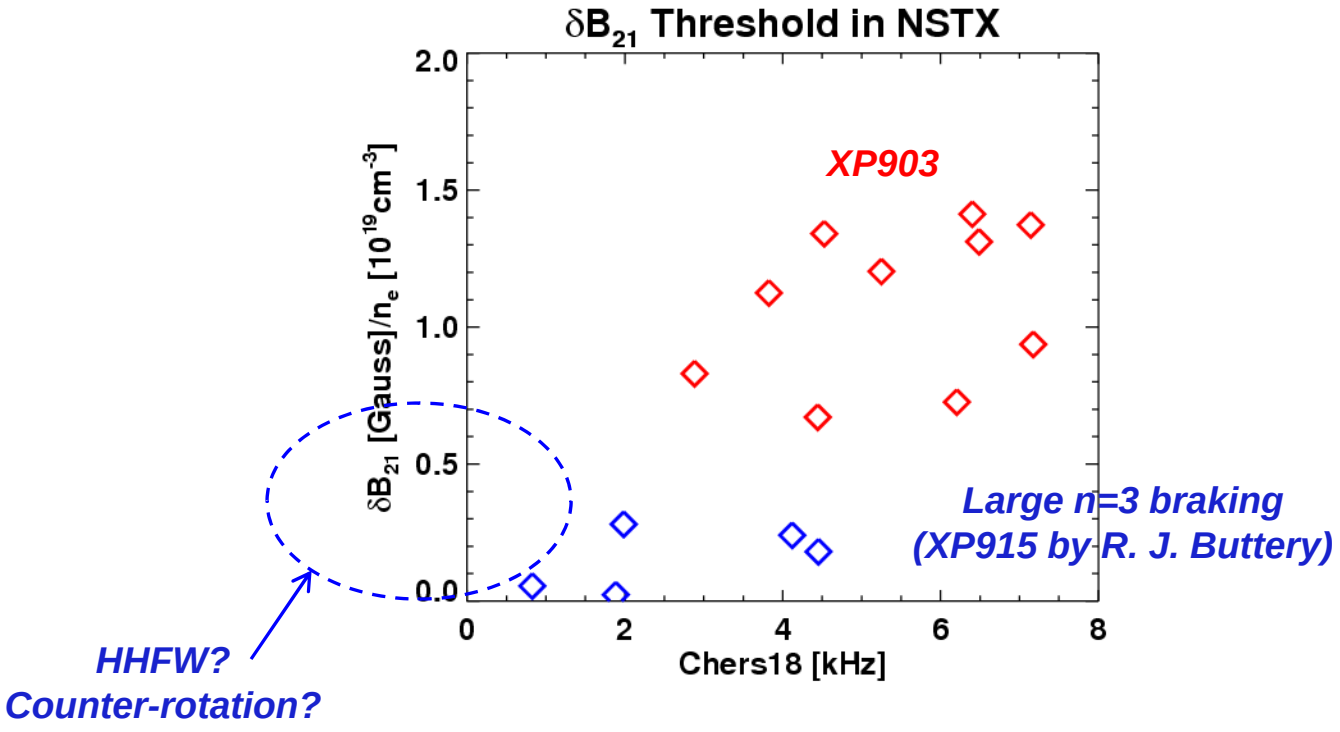
Locking database needs to address effects by rotation and non-resonant field

- Locking threshold has reliable density correlation, but large deviation occurs by different rotation and by non-resonant fields



HHFW plasmas can separate effects by each non-resonant field and low rotation

- HHFW plasmas can provide low rotation without non-resonant fields
- Error field thresholds in counter-rotation will be also interesting



This XP depends on XP1151, but also on WEP TSG leading on RF

- This XP is a piggyback on XP1151 – Influence of q-profile on tearing mode beta limit and 3D field sensitivity (Buttery)
  - XP1151 will use 0.5 day to study n=1 EF thresholds with different q-profile (q_{min} down to 1)
  - This XP is not coherent with XP1151, but is partially an extension of XP915
- This XP needs HHFW and thus WEP TSG leading
- Plans:
  - **Will be reviewed together with XP1151**
  - **Will require scheduling consistent with HHFW run plan**