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Initial results from XP-602

Long-pulse development at reduced density using EF correction

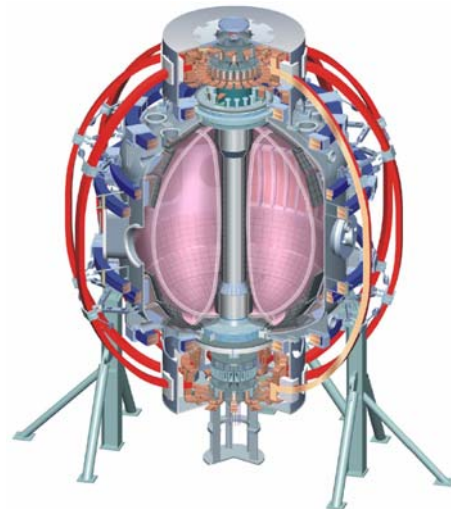
Jonathan Menard



NSTX Physics Meeting

March 20, 2006

PPPL – Princeton, NJ



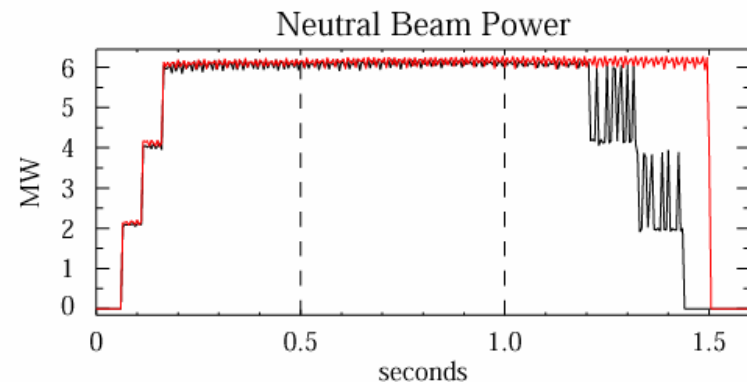
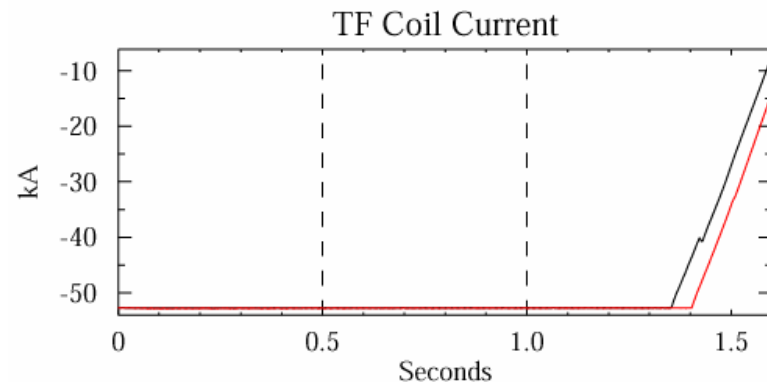
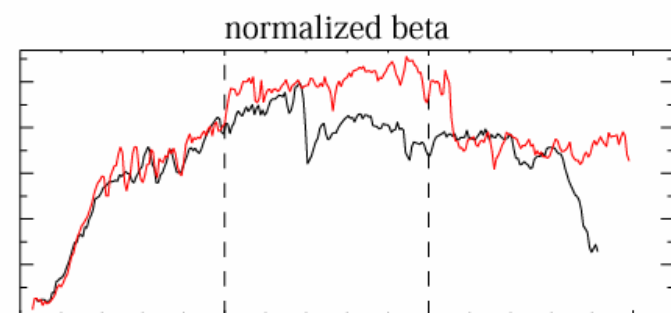
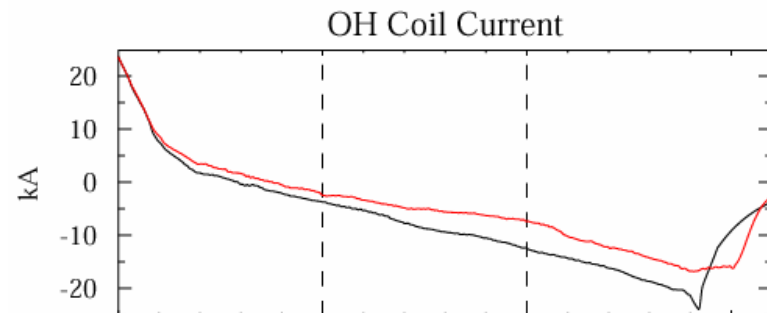
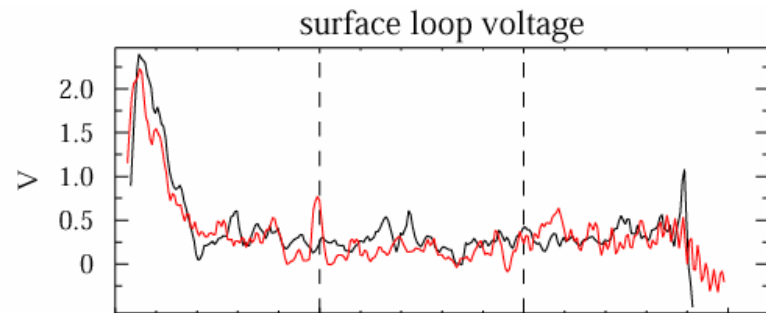
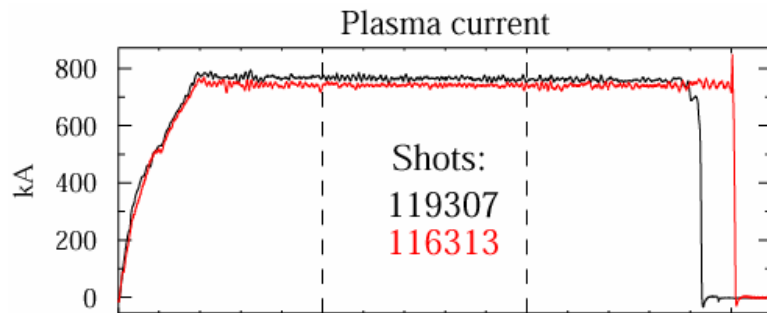
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IPP, Garching
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Largely reproduced long-pulse 750kA shot from 2005



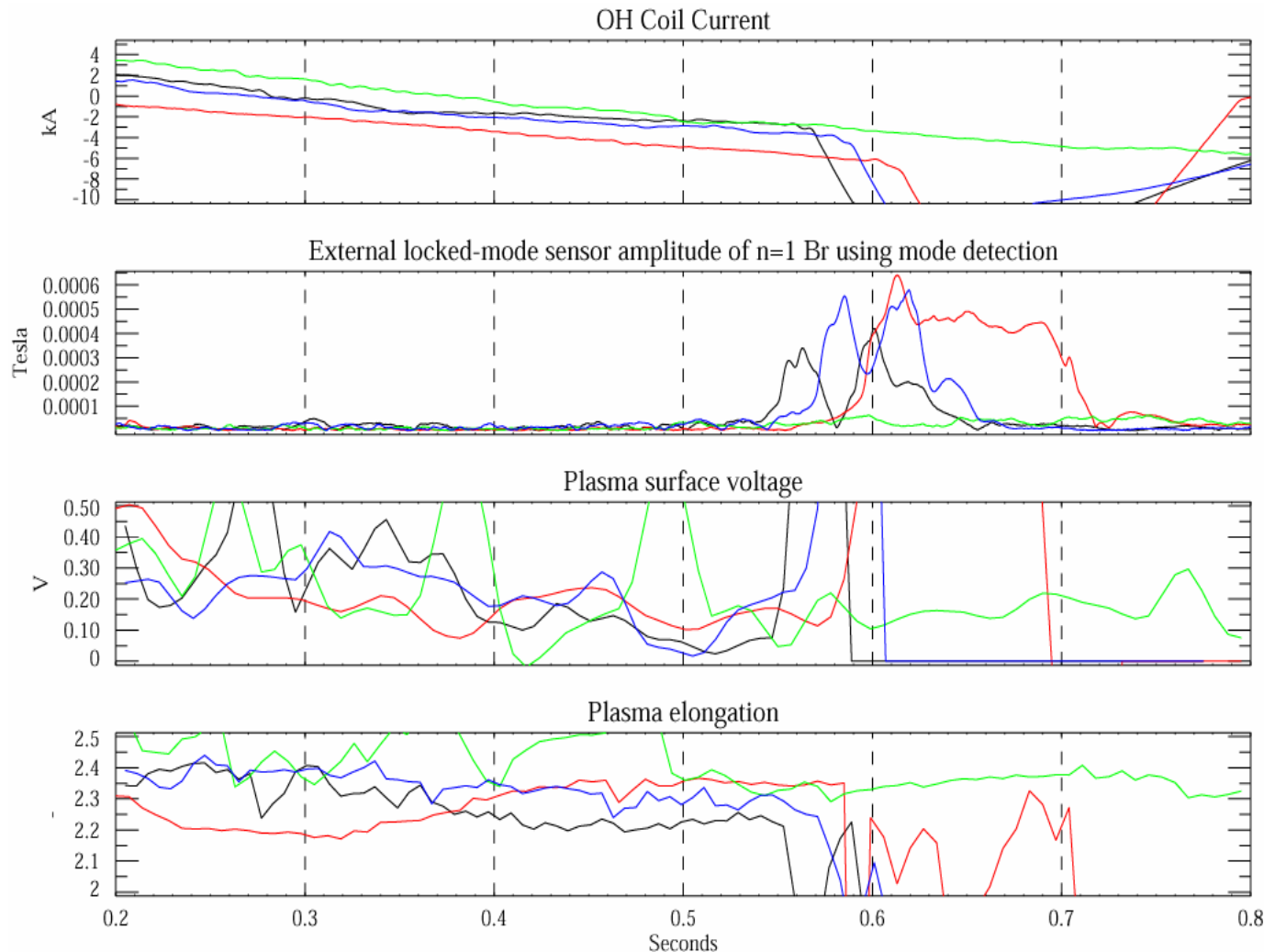
- Earlier MHD onset (reduces β_N), TF & NBI flat-tops shorter



Also reproduced flat-top locking event - useful for EFC studies for MHD XPs



- Low $V_{\text{SURF}} < 0.15\text{V}$ early for 150ms, then disruption (119310)



Shots:
119310
117574
116313
119320

- EFC extended 117574 in 2005, will use 119310 as target this FY
- rtEFIT used for shape control – by end of day kappa was well controlled and similar to desired value