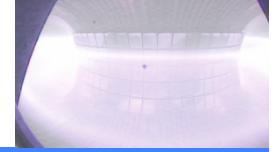


# **Settimana 27**

## **Programma F17**

### **TM stabilization by ECW**

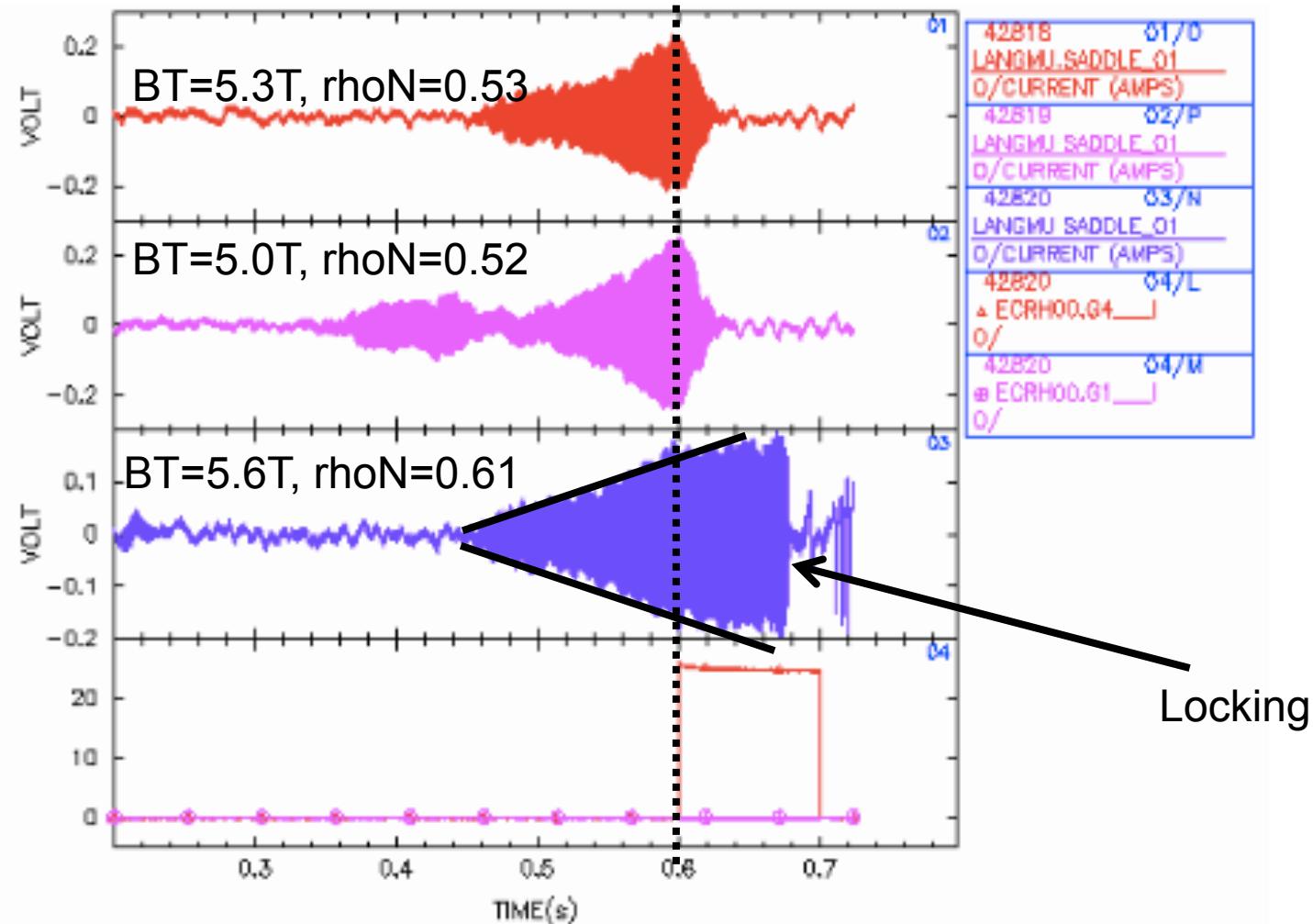
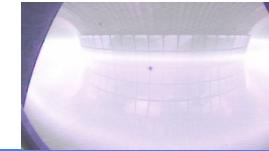
E.Alessi, G.Pucella



# Summary

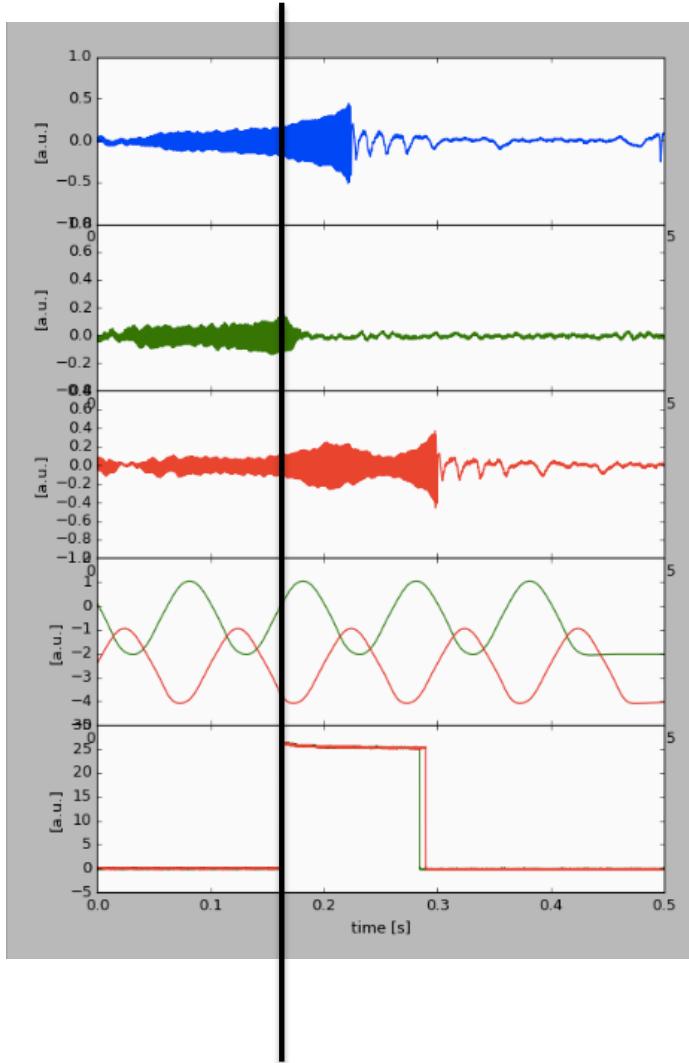
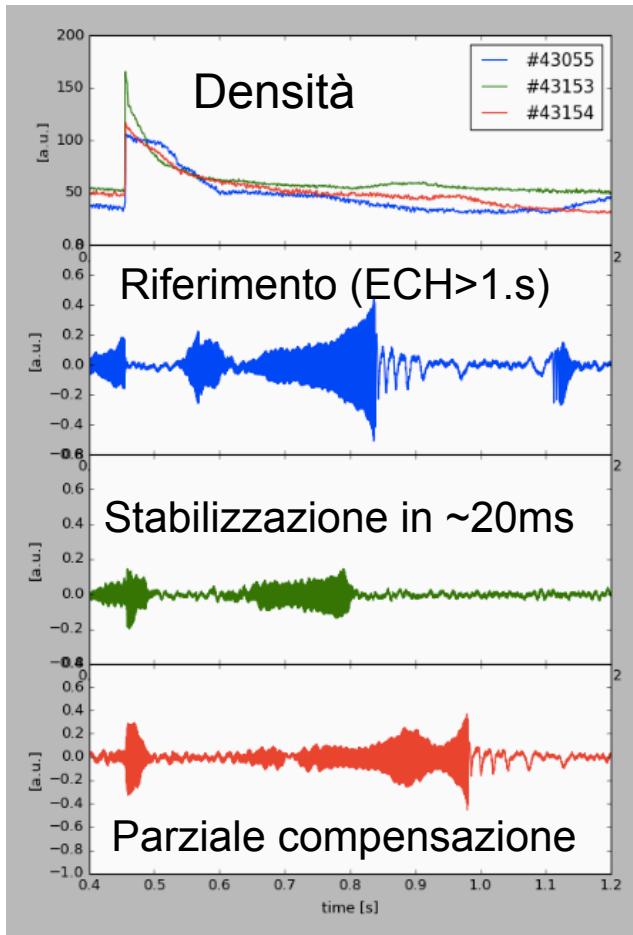
- Obiettivi:
- Studiare l'efficienza della stabilizzazione con tecnica di sweeping intorno alla  $q=2$  in differenti fasi del TM (pre-emptive, crescita lineare, Modo locking).
- Giornate: **03/07/2019**.
- Spari utili anche in :
  - 16-17/05/2019 (ECH restart)
  - 26/06/2019 (CTS)
- Scenario:
- $\sim 5-5.6\text{T}$  (ref. at 5.3T),  $I_P=500\text{kA}$ ,  $n_e \sim 0.5*10^{20} \text{ m}^{-3}$ , pellet at 0.45s (TM trigger)

# Stabilizzazione ECRH fisso (varia Bt)



Sotto ipotesi lanciatore posizione nominale, il beam tracing su scarica simile a 5.3 T,  $n=0.6 \ 10^{20}$ , (#42818) si ottiene  $\rho N=0.57$ .

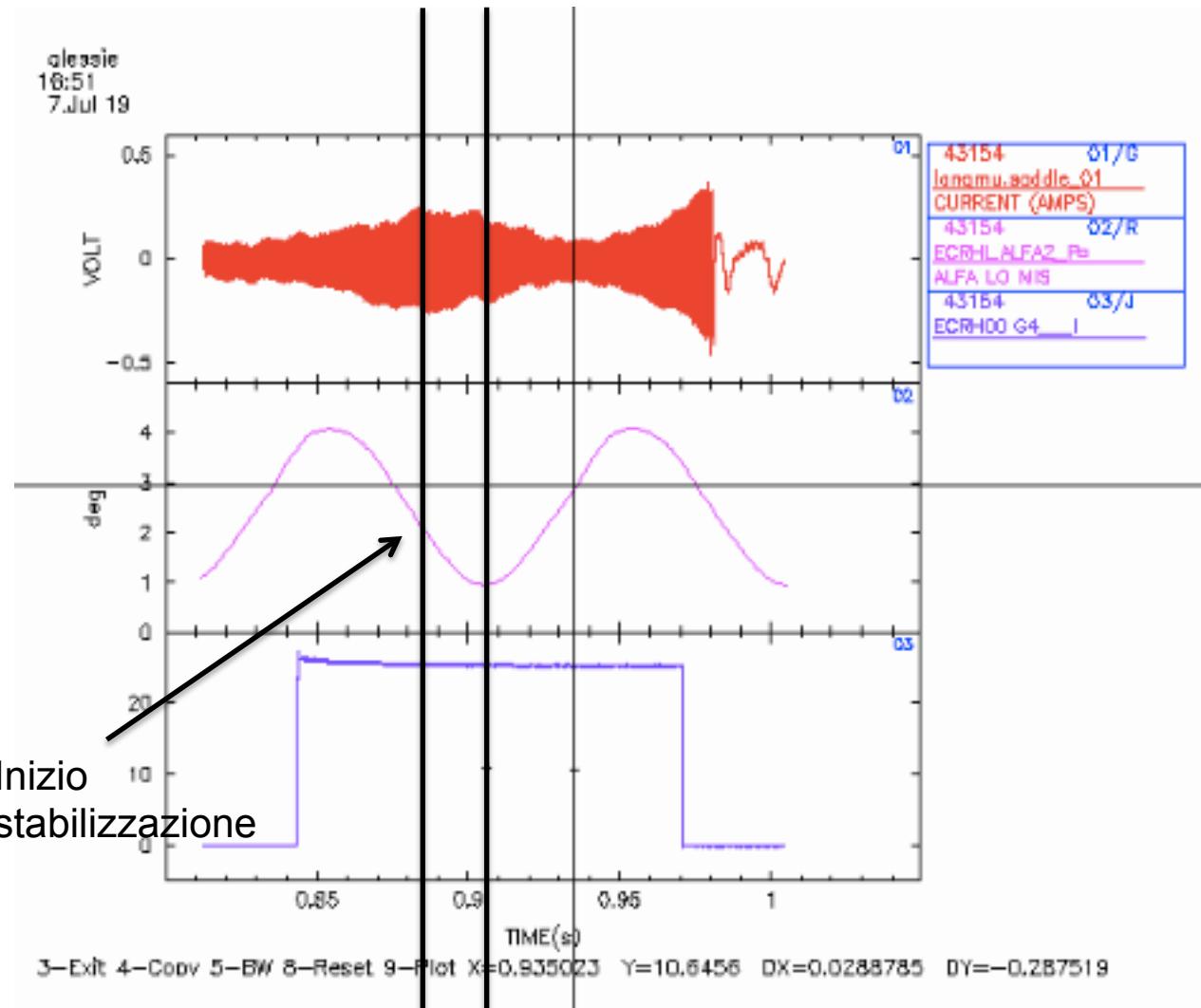
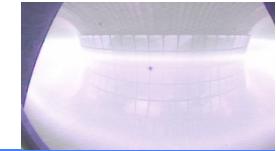
# EC sweeping (5.3T, 500kA, pellet at 0.45s)



43055:  
Reference da  
CTS. Anche ECH  
sun modo locked  
(ECH on at 1.s)

Gradi (invertiti):  
<0 indicano  
depositazione più  
esterna

# Position <-> effects (43154)



L'effetto  
stabilizzante inizia  
(e finisce) a  $\sim 3\text{cm}$   
di distanza  
dall'isola (tra 0 e  $1$   
deg).



# Osservazioni

- Ritardo effetti (Attesi) <-> posizione in 43154
- Completare con analisi a posizione fissa per casi *pre-emptive*, *mode locking*.