

# **DESIGN AND TEST OF A FAST FEEDBACKSYSTEM FOR ORBIT CORRECTION FOR TTF AND THE VUV-FEL AT DESY**

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*Presented by H.-T.Duhme*

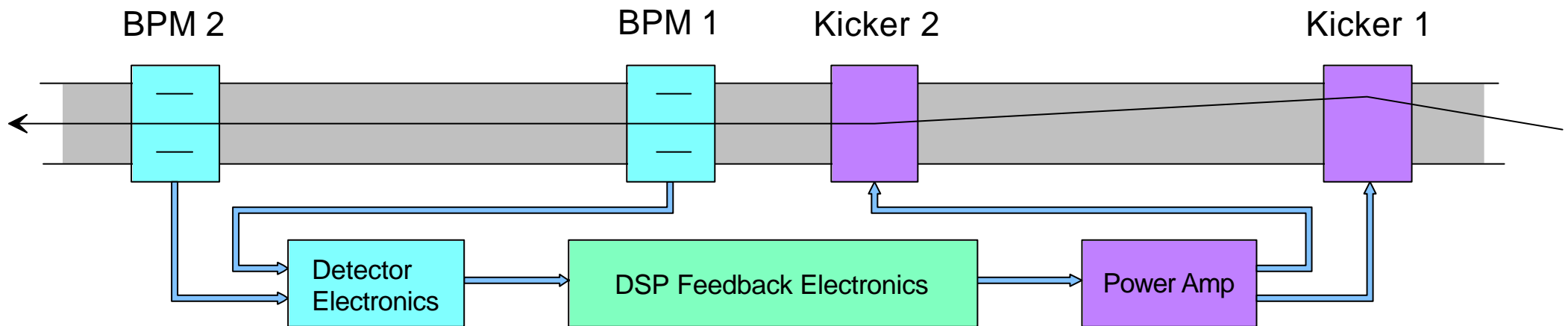
## **➤ The project**

- *Basic principle*
- *First results*

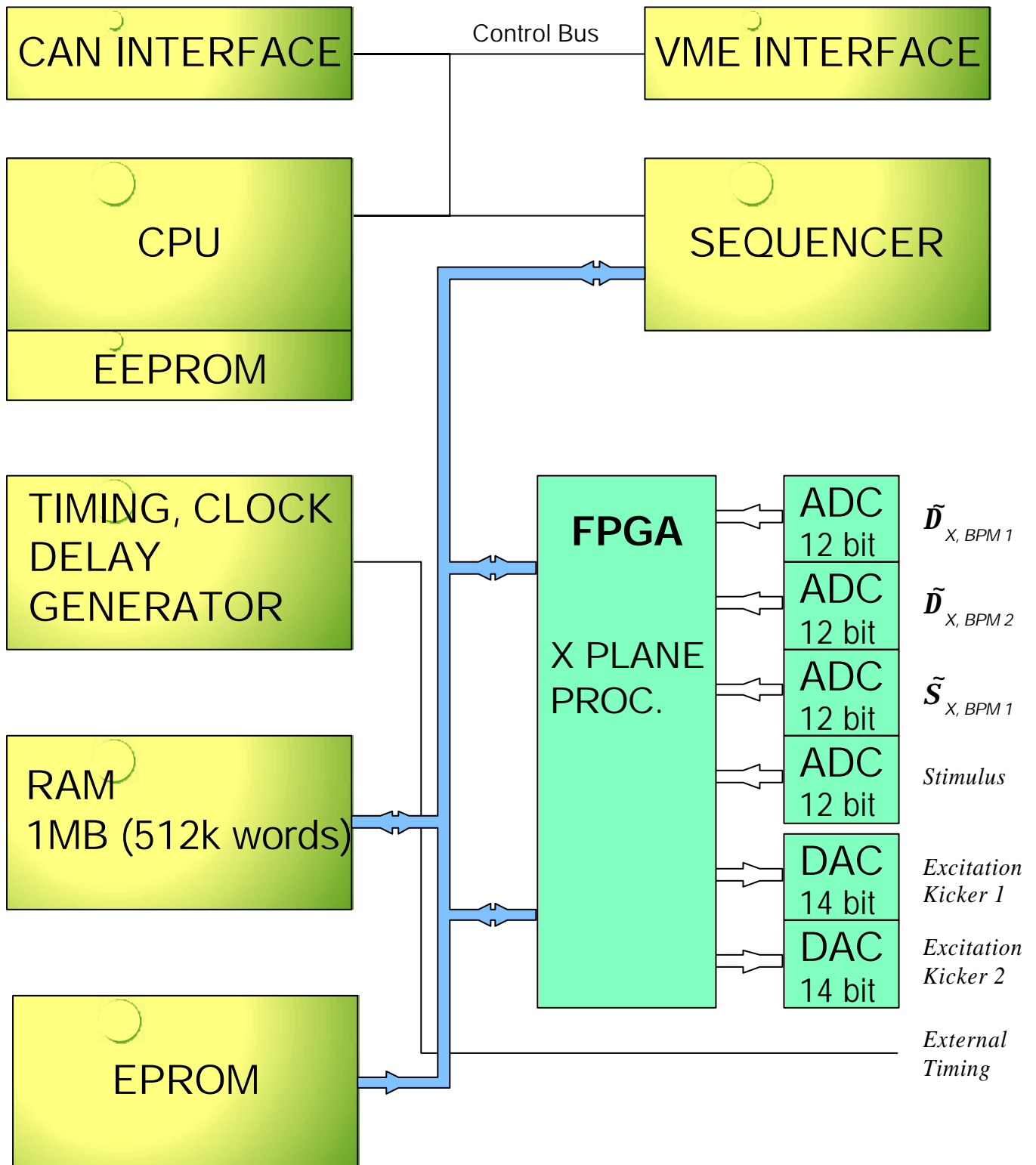
## **➤ Developments for TTF2**

- *Kickers (F. Obier)*
- *High power pulse amplifiers*

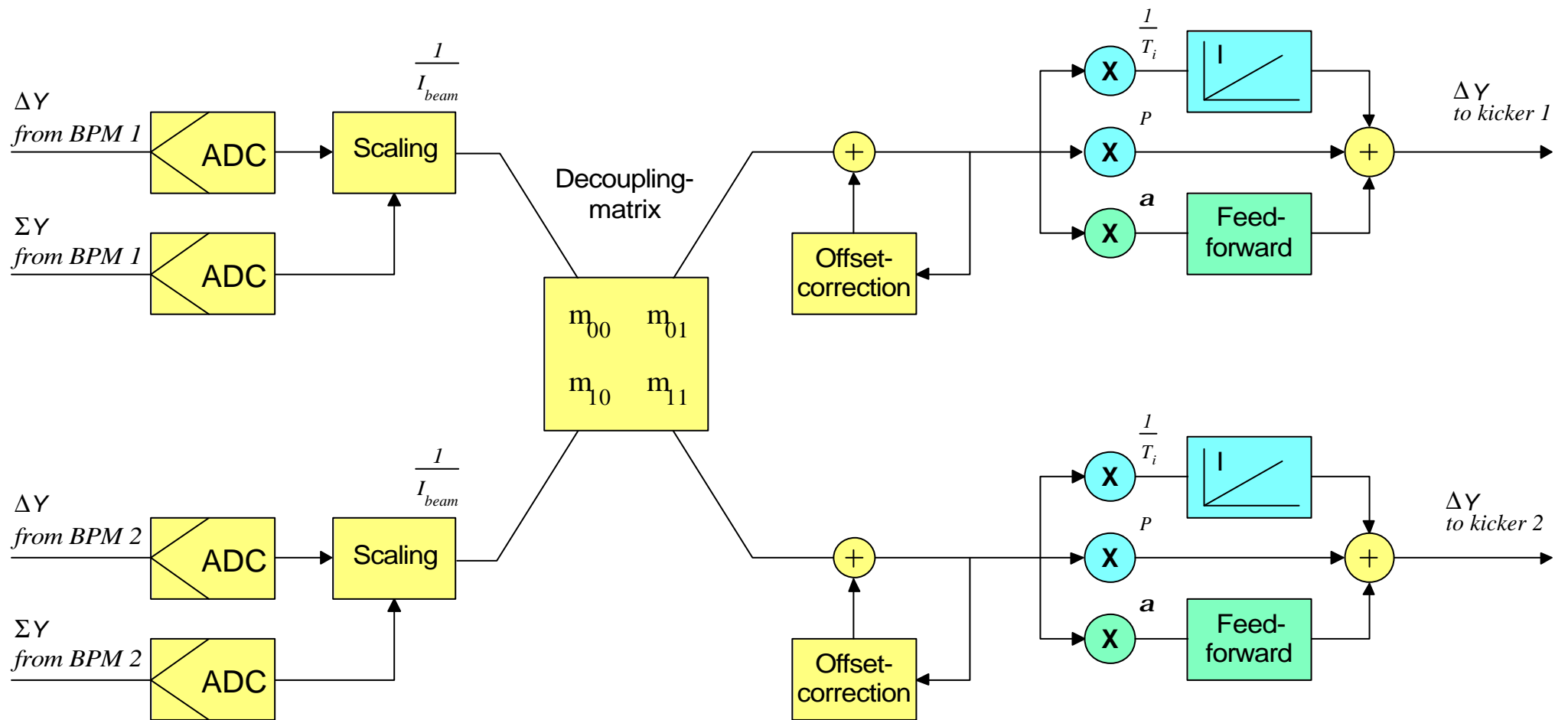
# *Basic components for one direction*



# Block diagram of the TTF Feedback DSP Board

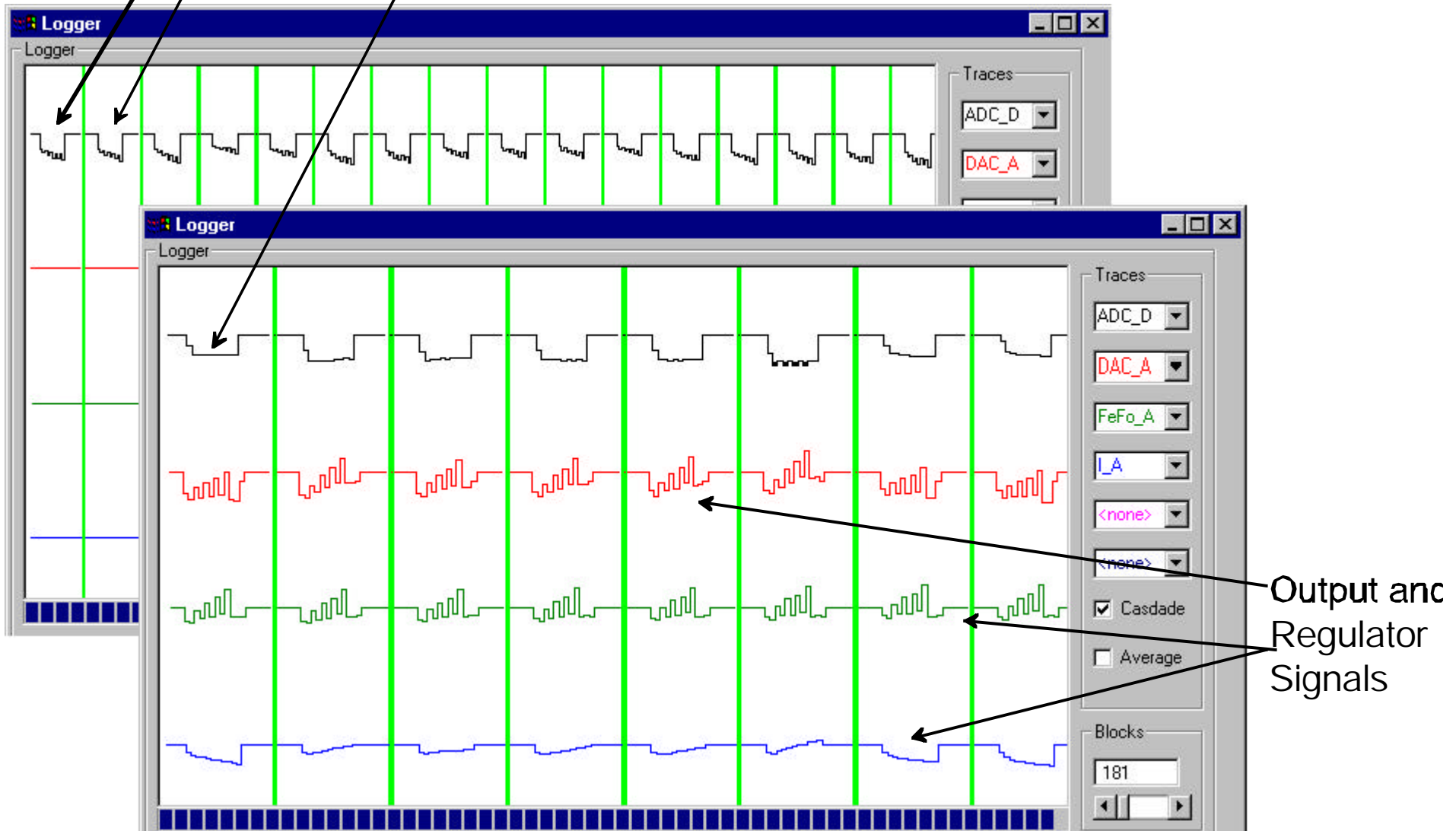


# Principle schematic of the TTF Feedback Controller

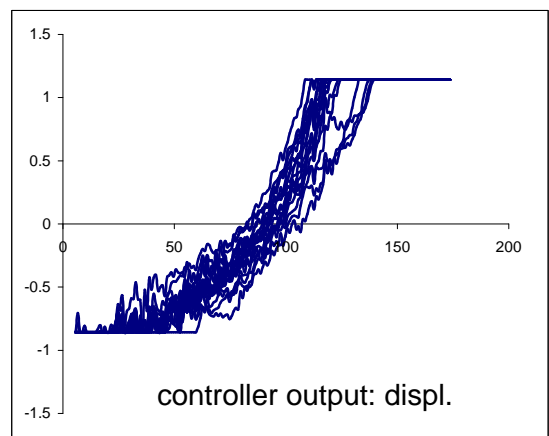
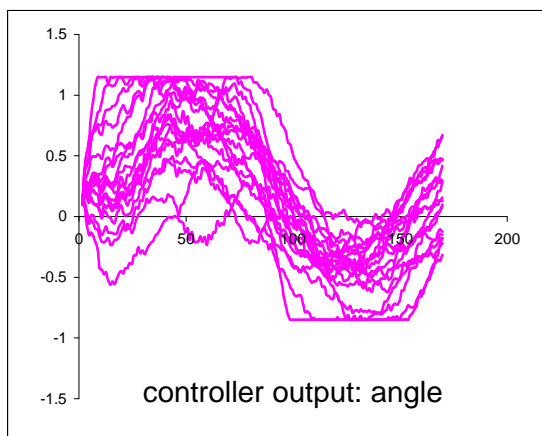
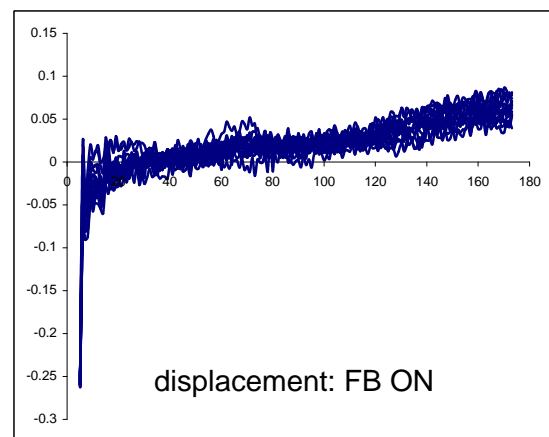
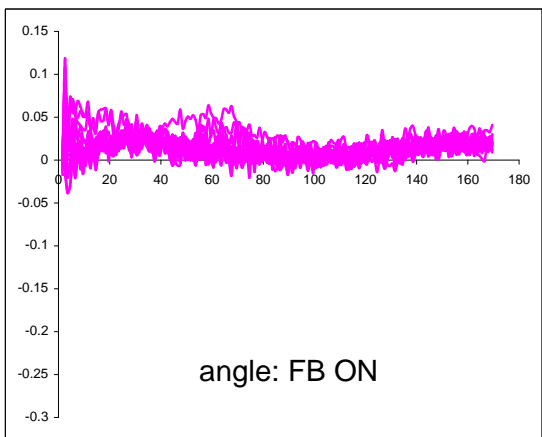
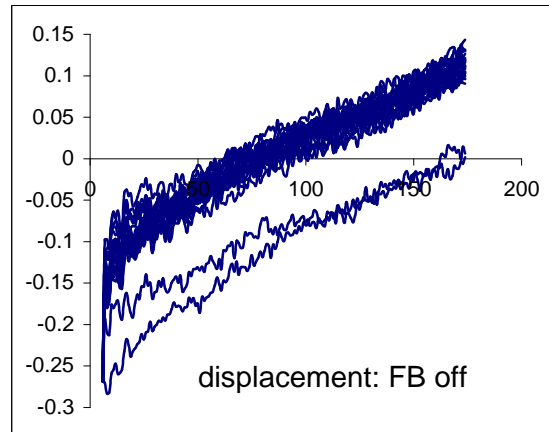
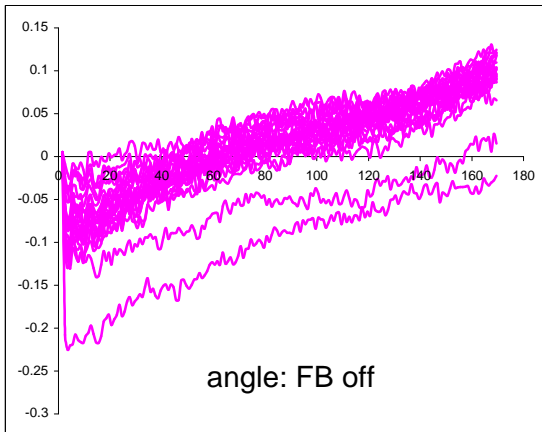


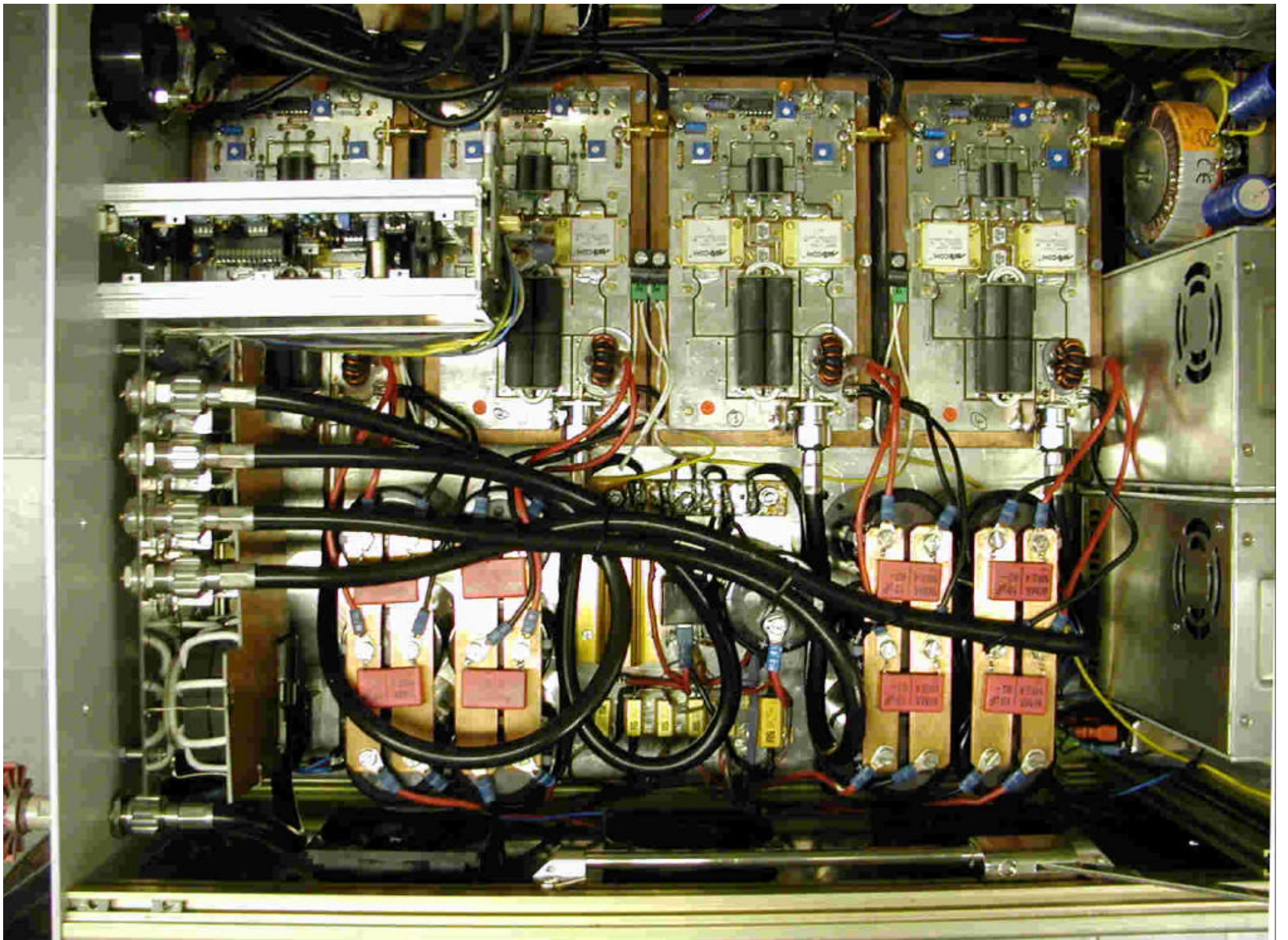
Consecutive trains of 10 bunches modulated with 500 kHz and with slope, Feedback is off.

Damped oscillation and compensated slope with Feedback in operation.



# TTF Feedback operating on 160 bunches







TTF-Feedbackkicker  
F.Obier



