

Update on TBL status

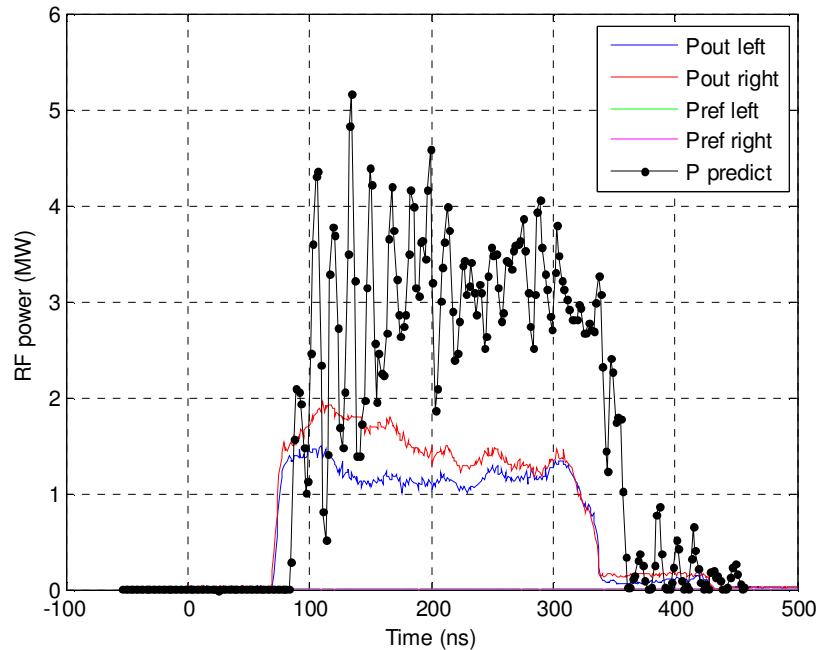
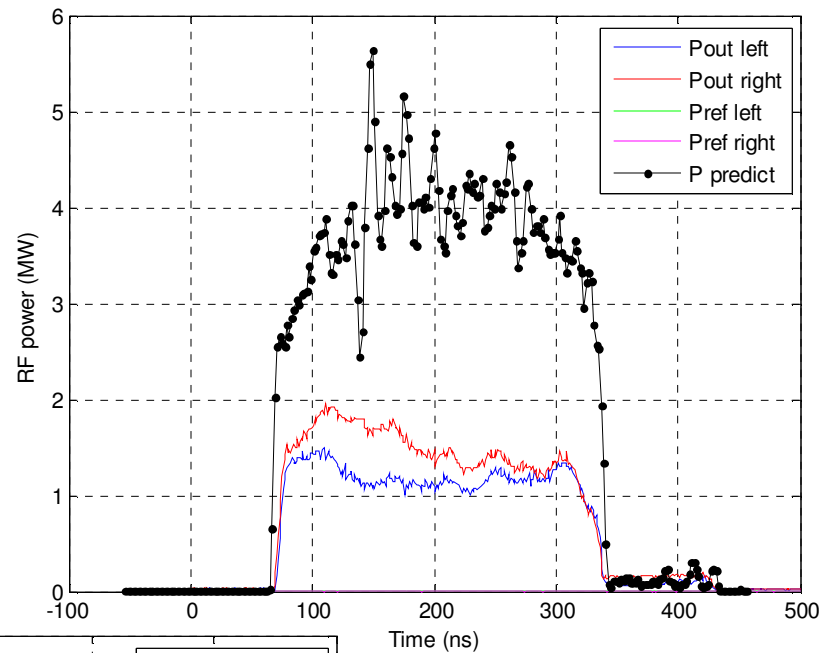
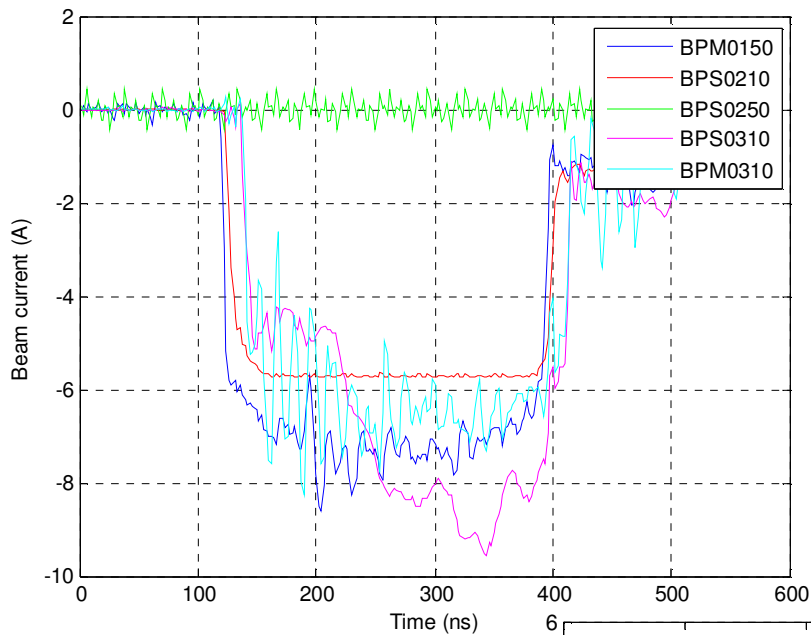
CTF3 committee 17.09.2009

- Several runs with beam, slowly increasing the current
Arrived at 10 A beam current and 20 MW 12 GHz power extracted
- Got experience with beam optics and handling for TBL
- Commissioning of instrumentation, BPM's, BPS's, RF-diagnostics for amplitude and phase, movers

Conclusion so far:

- 12 GHz production in good agreement with theoretical predictions
PETS is well behaved so far, transmission, vacuum
- Beam handling rather simple
- Some problems with BPM electronics

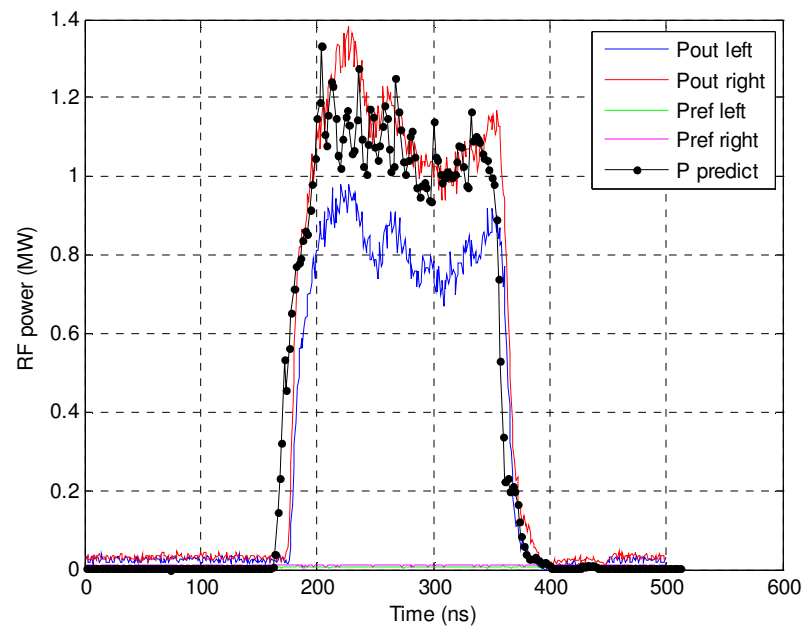
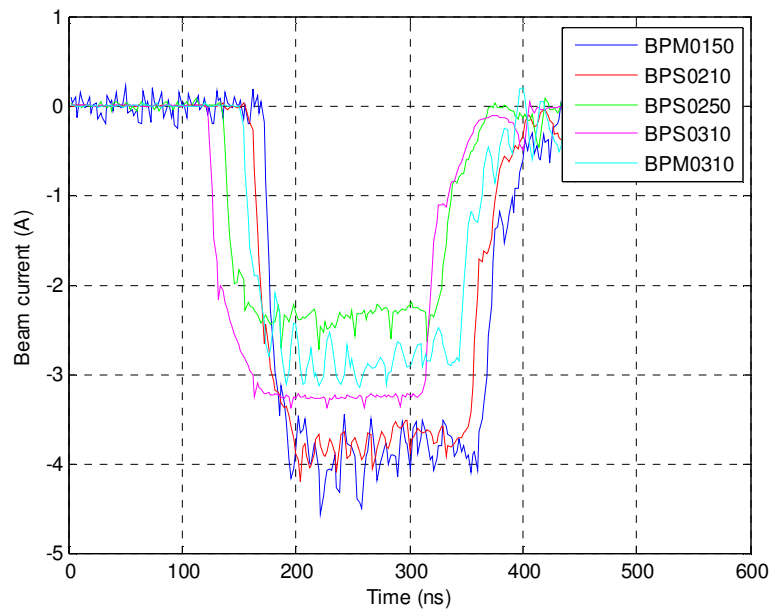
TBL run with 7 A but long bunches suspected



BPM 150 to predict

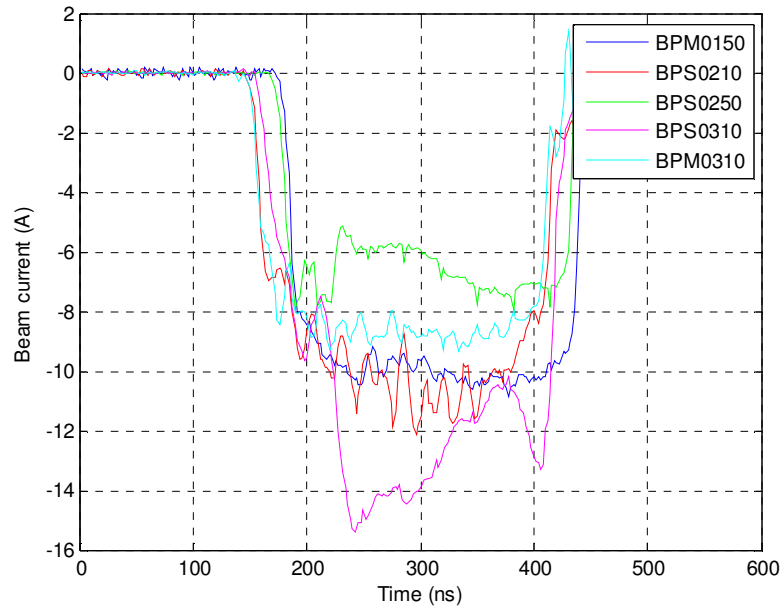
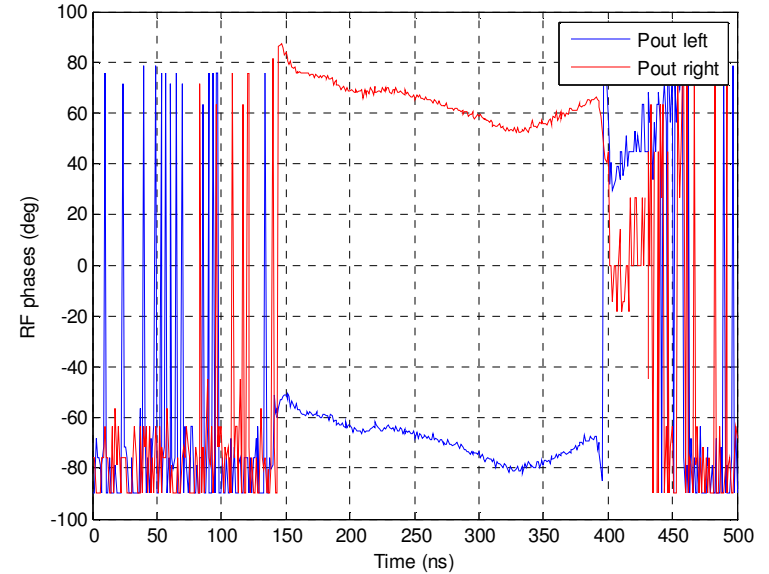
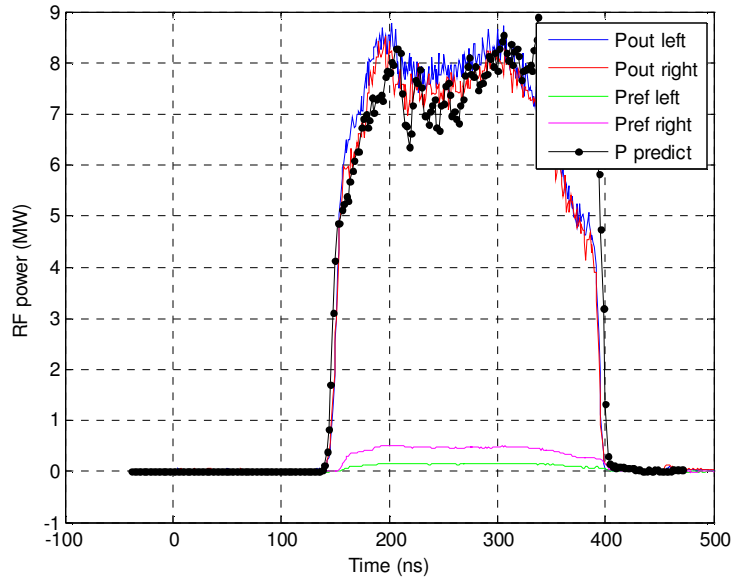
BPM 310 to predict

TBL run with 4 A and good agreement



BPS 210 to
predict

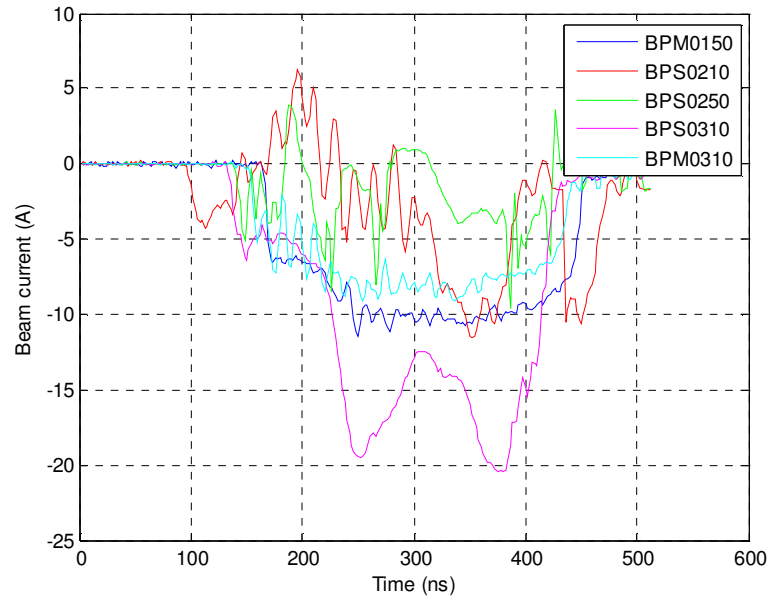
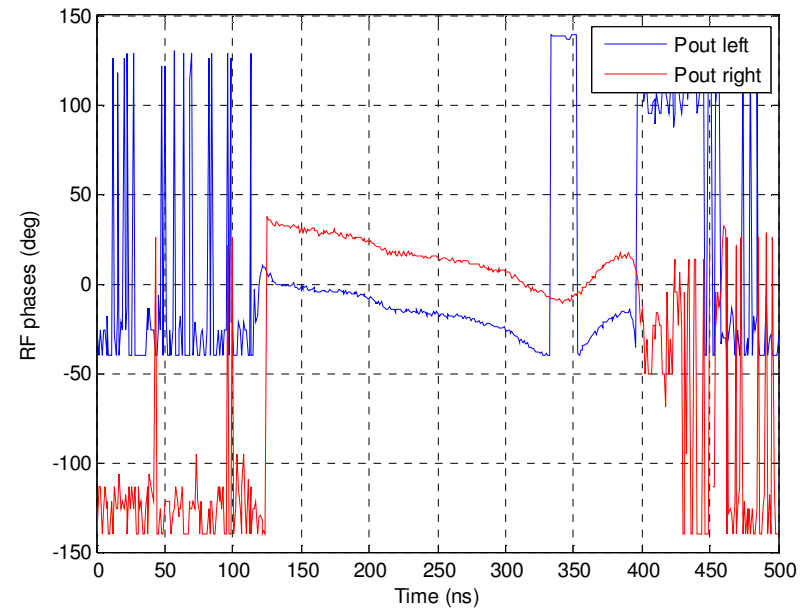
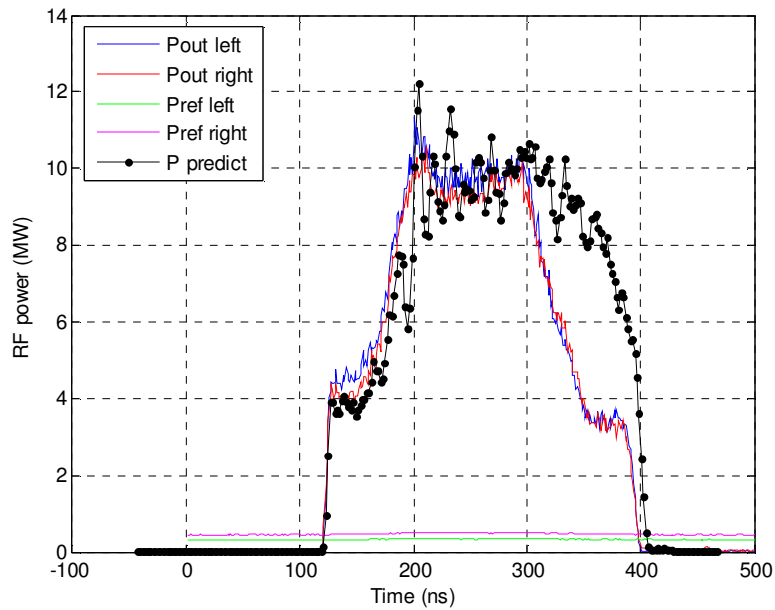
TBL run 15.9. with 10 A into the PETS Form factor 0.9



Good transmission
but noisy signals
from the BPS's

TBL run 15.9. with 10 A into the PETS

Optimized for peak power, Form factor = 1



Next steps

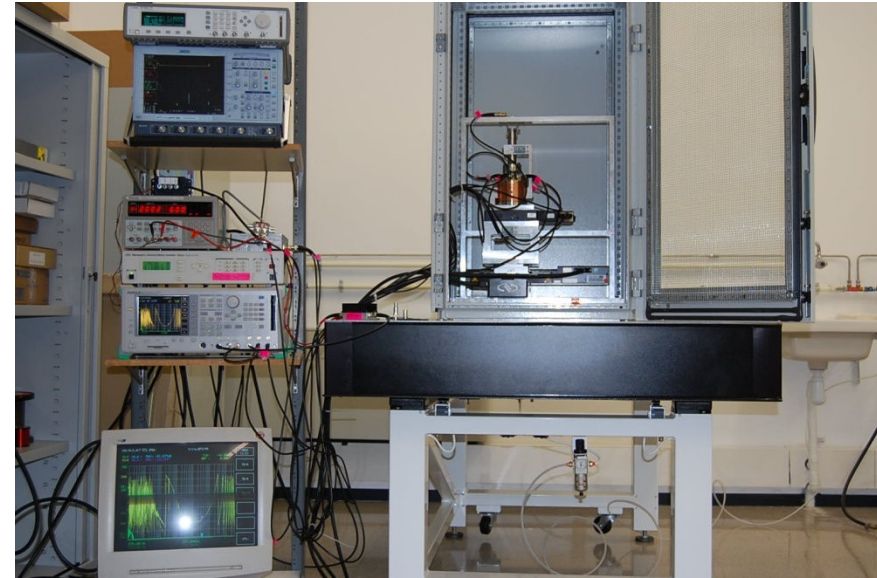
Commissioning:

- Higher current : 20 A, 100 MW (delay loop needed)
- Better BPS performance to measure resolution and to play alignment games with the movers

Finishing TBL:

- Finishing the beam line in the next shutdown 21.9 - 16.10
(all Quads, BPS, vacuum system and spectrometer)
- Series production of tanks launched
(Two tanks expected to be installed during the winter shutdown)
- Norwegian collaborators expected to work on TBL commissioning in 2010

Status on BPS's from IFIC Valencia Angeles Faus-Golfe



Status:

- BPS finished, calibration measurements ongoing
- Electronic droop compensation by Gabriel Montero next week (week 39)
- Juanjo will come to CERN week 41 and 42 to help with the installation