



Paper update

Shinji Machida
STFC/Rutherford Appleton Laboratory
11 June 2015

Difference

Paper contributions

- I. Introduction - S. Sheehy
- II. The 150 MeV KURRI ADSR-FFAG - S. Sheehy
 - II (A) Diagnostics - S. Sheehy & Y. Ishi?
- III. Correction of COD - S. Sheehy
- IV. Field index measurement - S. Sheehy
- V. Matching at injection - S. Machida
 - V. (A,B,C) Simulation work - M. Tahar & F. Meot
 - V.(C) Dispersion matching - D. Kelliher
- VI. Betatron tune measurement - ?
 - using FFT - D. Kelliher?
 - using real time spectrum analyser - Y. Ishi?
- ~~VII. Stripping foil effects - C. Rogers~~
- VIII. Discussion - S. Sheehy
 - (A) Dispersion effects on COD/k measurement - D. Kelliher
 - (B) Toward high power operation
- IX. Summary - S. Sheehy



1. Introduction
2. The 150 MeV KURRI ADSR-FFAG
3. Measurement of orbit position in ring
4. Measurement of orbit position at injection
5. Measurement of betatron tune
6. Discussion
7. Summary

Group the main body by measurement itself and its technique, not by the parameters derived from the measurement.

(I removed foil effects section in order to finish this publication quickly.)

URL

<https://www.overleaf.com/1327548fyjtrt#/3271331/>

First complete draft is due on Friday 19 June 2015.



Vertical orbit

Shinji Machida
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Vertical BPM

Re-analyse three set of vertical BPM data.

1. D1012 (nominal D strength) [A] and change ST5V.
2. D950 [A] and change ST5V.
3. D950 [A] and change ST4pV.

Phase advance between ST4pV and ST5V is about 90 degree.

Vertical BPM

Calibration has not been done yet.

However, accurate capacitance is now used to calculate induced charge.

bunch monitor capacitance

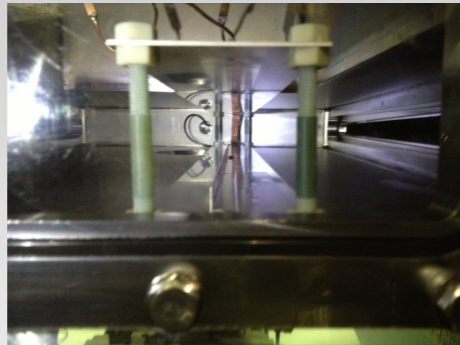
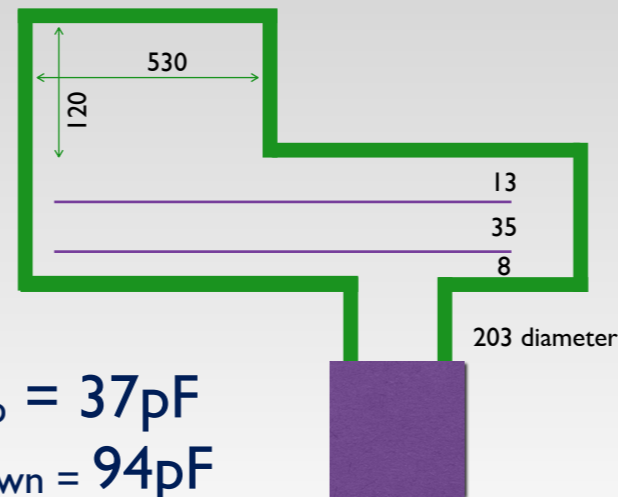


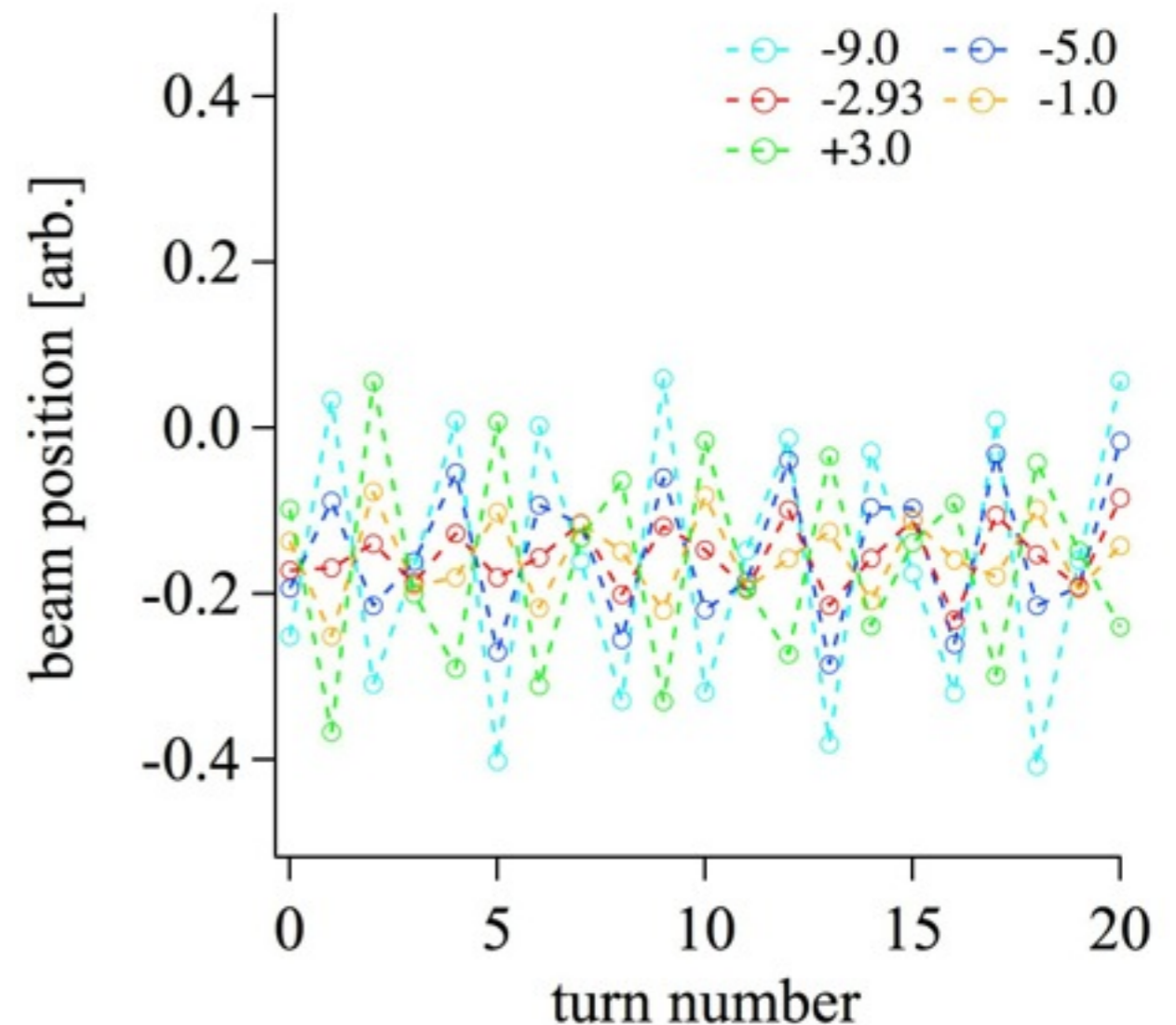
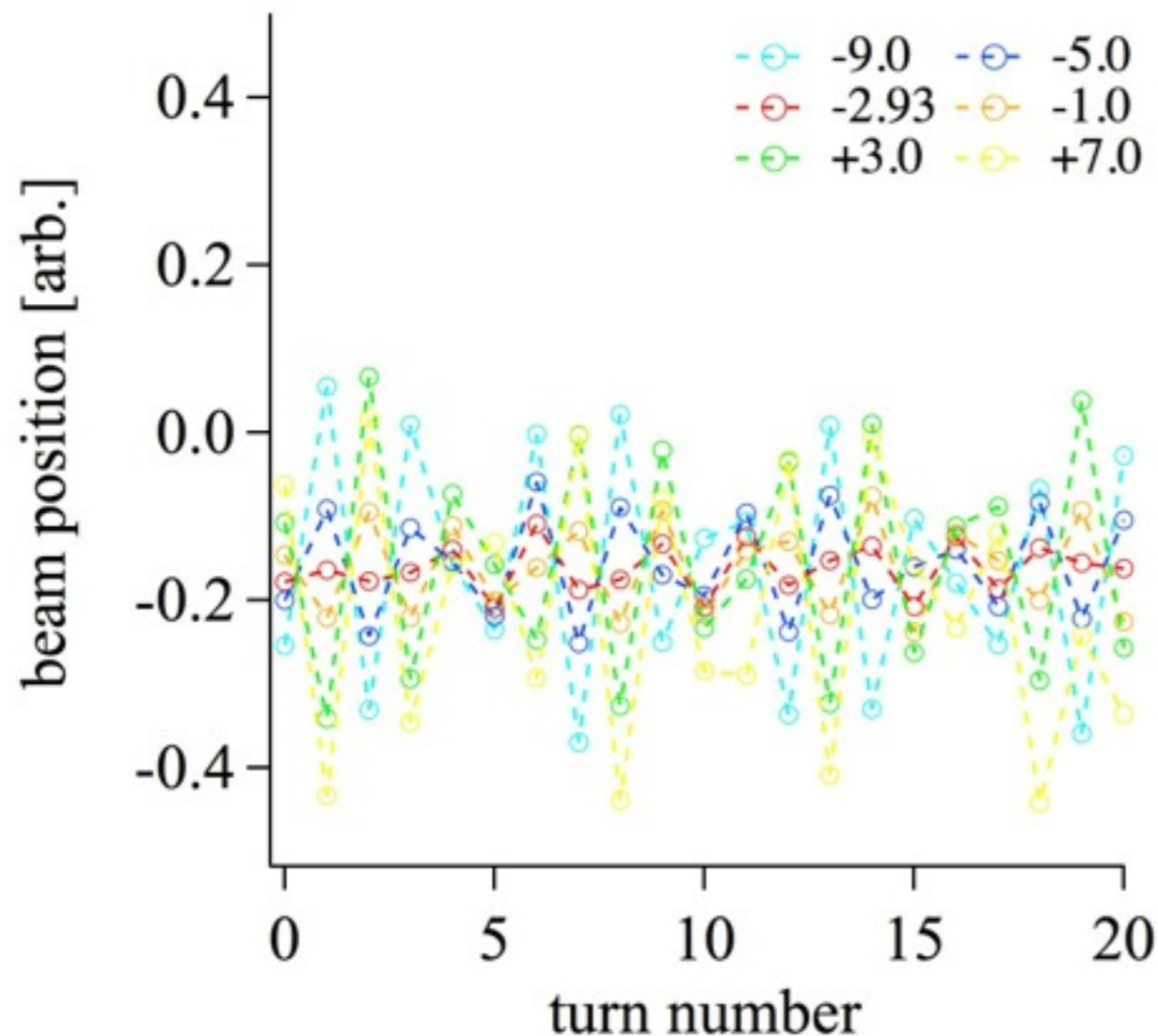
plate geometry
length 1000 mm
width 100 mm
thickness 2 mm



$$C_{\text{up}} = 37\text{pF}$$
$$C_{\text{down}} = 94\text{pF}$$
$$C_{\text{up}} / C_{\text{down}} = 0.4$$

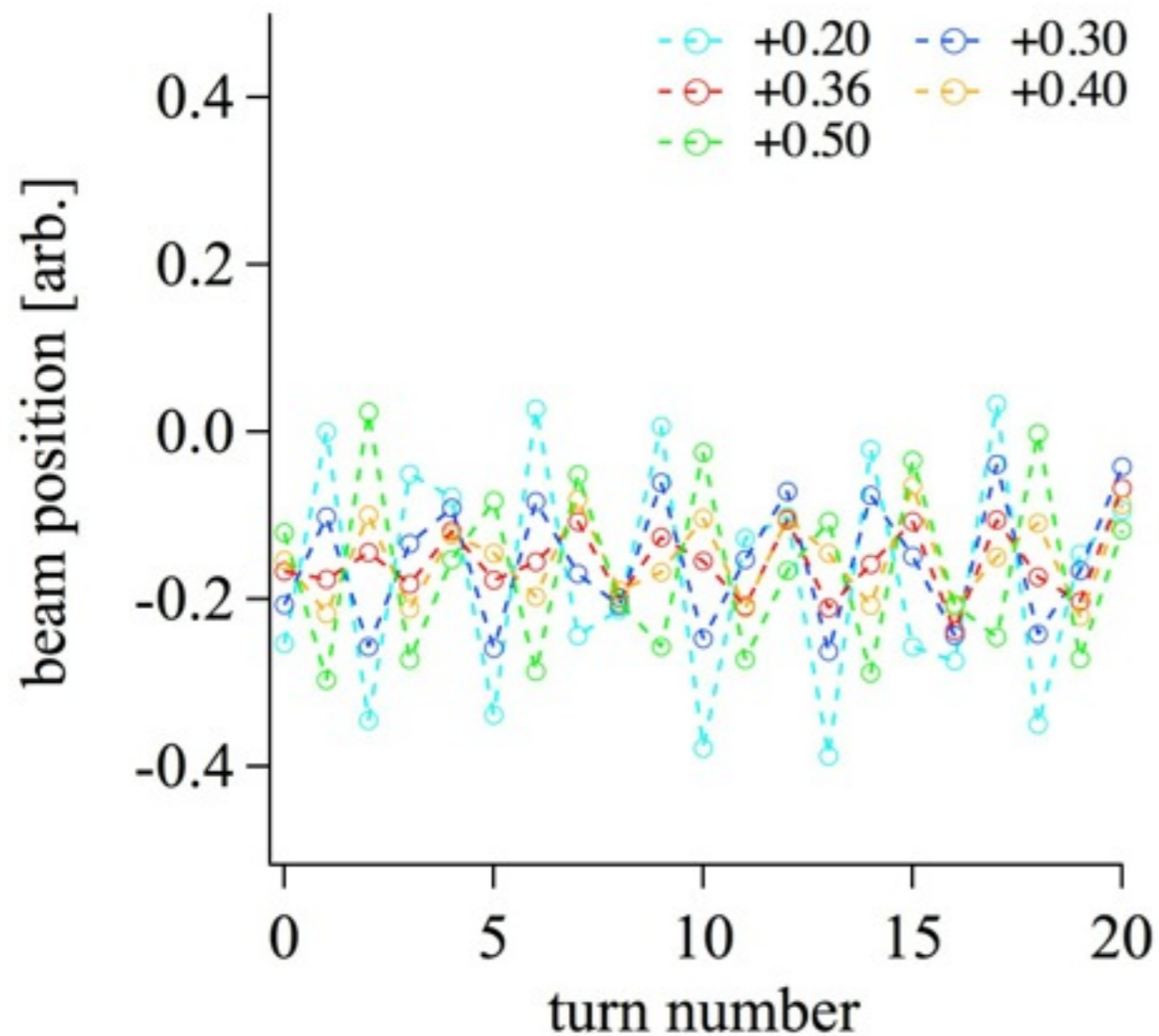
Vertical BPM

1. D1012 (nominal D strength) [A] and change ST5V.
2. D950 [A] and change ST5V.



Vertical BPM

1. D950 [A] and change ST4pV.



Is vertical COD real?
(order of 2 ~ 5 mm.)