**BBLR MD 7 July 2009**

Rama, Guido, Frank

10:07

4 bunches 1e11 per bunch

flat top from about 2000 to 6500 ms

55 GeV, emitY=~1.5 micron normalized

8 mm x offset at wire position

Target tunes Qx=.31, Qy=0.28

Xi=0.1 im both planes

Coupling corrected, with setting -5e-4 in trim editor for QS, 10:37

Qx=0.1348, Qy=0.1836/0.1816 no bump, no wire

Qx=0.1318, Qy=0.1846 ??dQx=-0.002, dQy=+0.001 – 5 mm Y bump, wire 250 A

Qx=0.1328, Qy=0.1836, 0.1855,…. -5 mm Y bump , wire 250 A 11:13

11:28 first bump back to 0, another – 5 mm Y bump (orbit -7 mm measured!?)

Tunes 0.1318, 0.1846

11:30 another -5 mm on top 9measured -14-15 mm)

Tunes 0.1299, .1875 (2 times)

-0.0019, +0.0029

Turn off wire to cross check

Tunes 0.1348, 0.1826 wire current 0

**dQx=-0.0049, dQy=0.0049, 11:41**

**both planes give 11 mm distance !**

half current, tunes 0.1328, 0.1846

cross talk between x and y tune signal fixed by changing bunch selector delay back and forth

-2.5 mm 11:58

.1309, .1875, half current

0.1348, 0.1826 wire current 0, 12:03

0.1279, 0.1895, wire 250 A

**dQx=-0.0069, dQy=+0.0069 12:05**

**distance 9.5 mm wire 1**

[morning wire scans sigma = 0.924, 0.8 (betay=28 m)]

Try to contact expert for wire scanner Ana G., no response

Set first wire back to 0

Excite second wire to 250 A, 12:21

0.1348, 0.1836/0.1826 all wires at 0

250 A on second wire, 12:26:

dQx=, dQy=

problem to excite the second wire

scan wire current at 9.5 sigma 13:36

0 wire current, 0.1357, 0.1807, 13:39

After a long break 15:58

wire scan, Sigma=0.8,0.7 mm, beta=28 m

PS emittance ~1 micron

+250 A wire 2 :

Qx=0.1406, Qy=0.1777 250 A

**dQx=-0.0058, dQy=-0.0055 => 11, 10 mm**

0 current as new reference Qx=, Qy=

0.1406, 1777 wire on

0.1357, 1816 wire off

**dQX=+0,0049, dQy=-0.0039**

* **12 mm**

**2nd wire of correct, opposite polarity**

1426, 1768 with wire on

**dQx=0.0069, dQy=-0.0048**

**=>10.1,10.7 mm**

**move 2nd wire another +0.5 mm**

**0.1436,0.1748**

**dQx=0.0079, dQy=-0.0068**

* **9.4 , 9.0 mm wire 2**