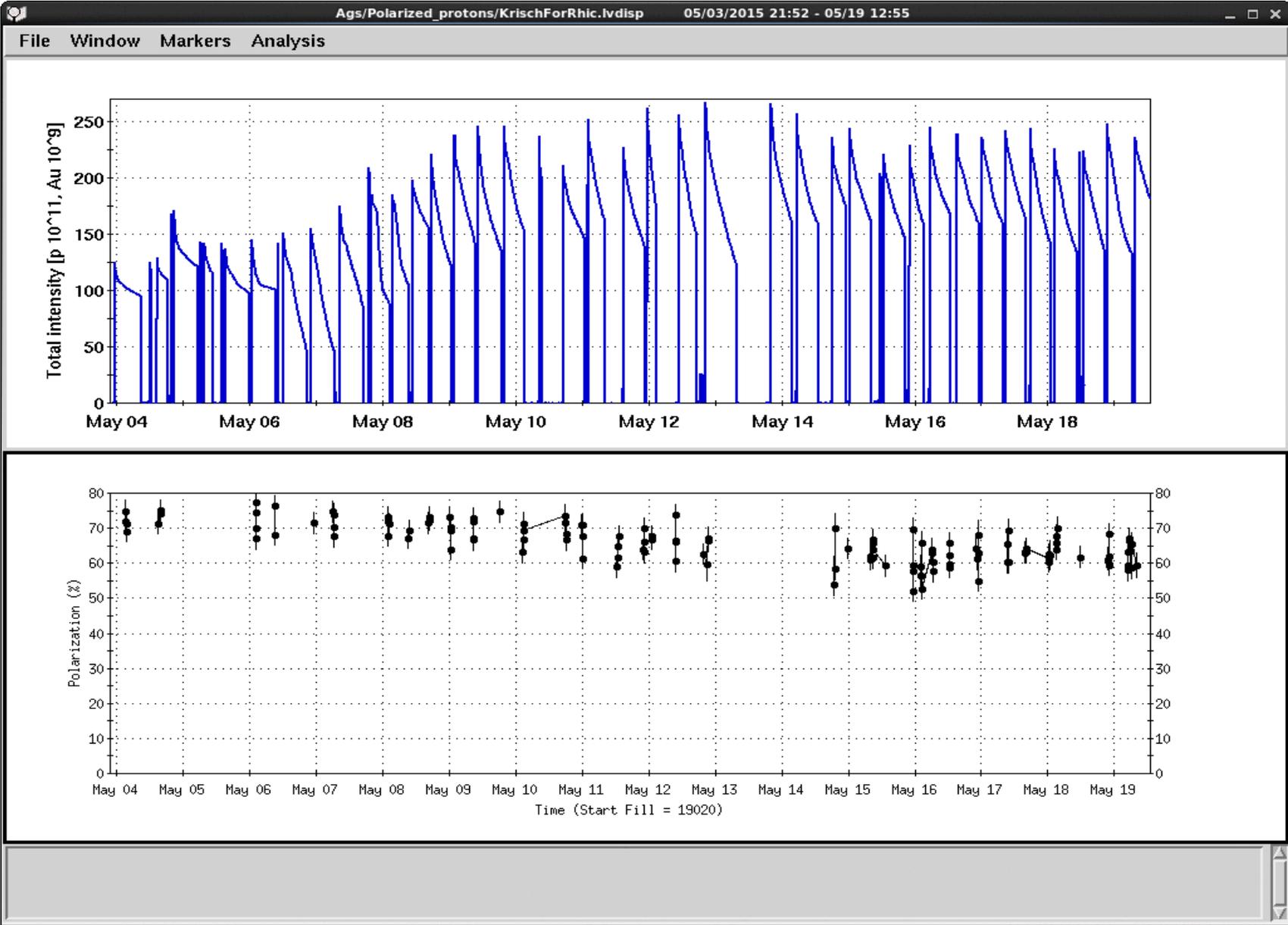


AGS/Booster Status

Haixin Huang

May 19, 2015
Time Meeting

AGS Polarization for RHIC Fills (Last 2 Weeks)



Haixin Huang

NATIONAL LABORATORY

AGS Au Bunch Merge 6->3->1

RemoteScope

Setup Scope Signal Trigger Diagnostics Help

Scope Name	User	Session Start
MCR_01	zeno	May 18 12:37
MCR_02	kling	May 18 08:32
MCR_03	zeno	May 18 16:59
MCR_04	zeno	May 18 18:06
MCR_05	zeno	May 18 12:57
MCR_06	bmartin	May 18 02:22
MCR_FAST_07		
MCR_FAST_08	maffei	May 16 23:26
MCR_FAST_09	zeno	May 18 18:11

Signals

Ch 1: axi.g5.wcm(1)

Ch 2: AGS_MTN_RANGE

Ch 3: AXIA15_XFRMR_SLOW

Ch 4:

Trigger

Machine: Booster

Start: Booster F3/A5

Clock: Realtime

Delay: 0 usec

PPM Users:

1

2

3

4

Cycles:

First

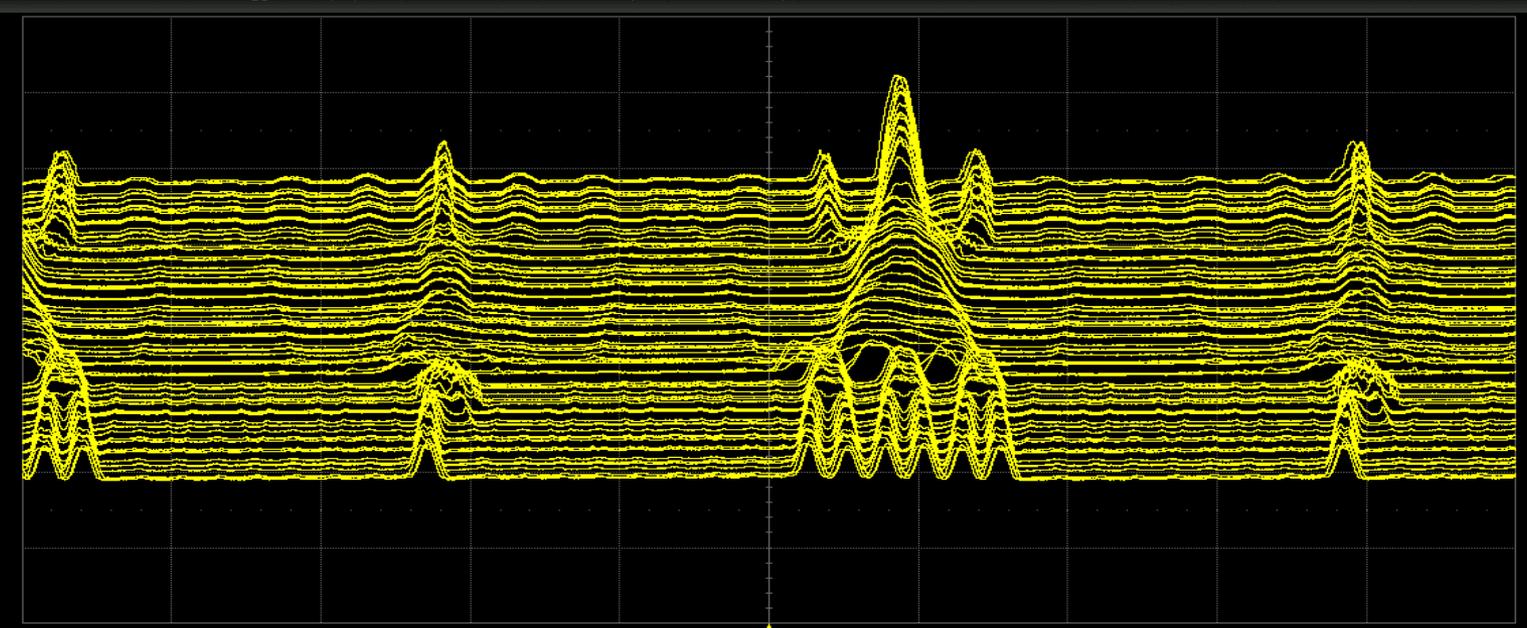
Second

Third

Fourth

LeCroy WR104MXI-A

File Vertical Timebase Trigger Display Cursors Measure Math Analysis Utilities Help



Timebase 0.00 μ s Trigger C2 DC

Seq. 80 1.00 μ s Stop 1.000 V

100 kS 10 GS/s Edge Positive

5/18/2015 7:21:45 PM

Channel 2 on scope MCR_FAST_07 successfully reconnected to signal BXI.LTB.DH1_CURRENT.
Updating analog signal information...
New rdesktop client successfully spawned.
Setup file /operations/app_store/ElogServer/tmpFiles/RemoteScope.1431987071.230687100 successfully saved.

Status

- Started Gold merge 6->3->1 last Friday. To use it for RHIC fill, the longitudinal emittance has to be under 0.7eVs .
- Source polarization was low after maintenance day, 75-76%, slowly getting better, now is around 79-80%. It may require another maintenance behind APEX on Wednesday.
- Sin9v harmonic at 36+ shape is critical for vertical emittance growth. The point at 574ms has to be lower to avoid emittance growth. Right now, operators don't use automatic correction around 36+ for sin9v.
- New JQ timing shows the effect with on/off. JQ on: 66.49 ± 1.06 ; JQ off: 60.94 ± 1.08 ; ratio: 1.091 ± 0.026 . But currently we don't see the benefit again in the fresh test around noon.
- Siemens requires 3 hours work (outside ring) to deal with oil leak. The work is postponed to next maintenance day.
- AGS eIPM setup made progress yesterday. We will devote more time for it to get another measurement on AGS emittance.