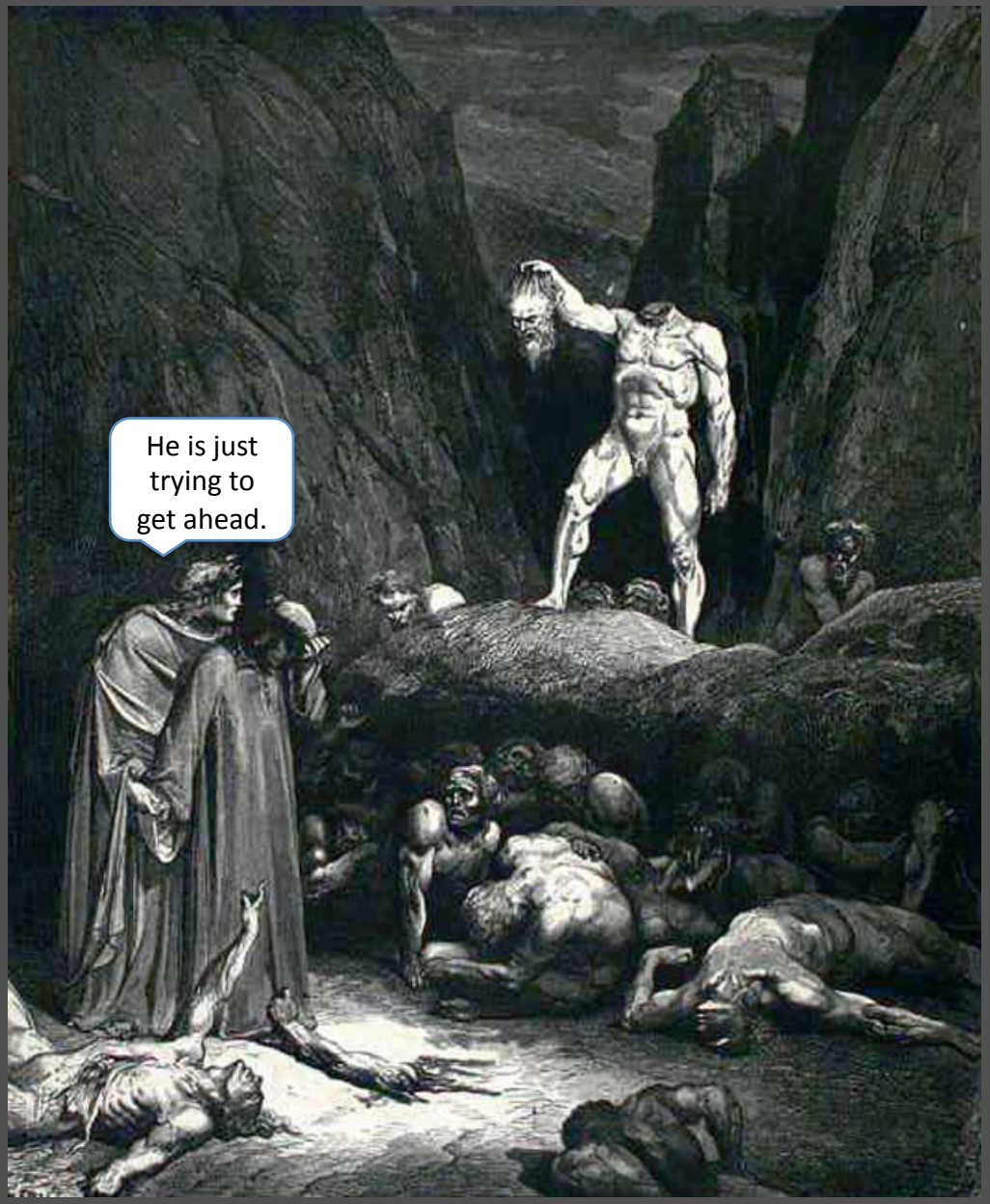
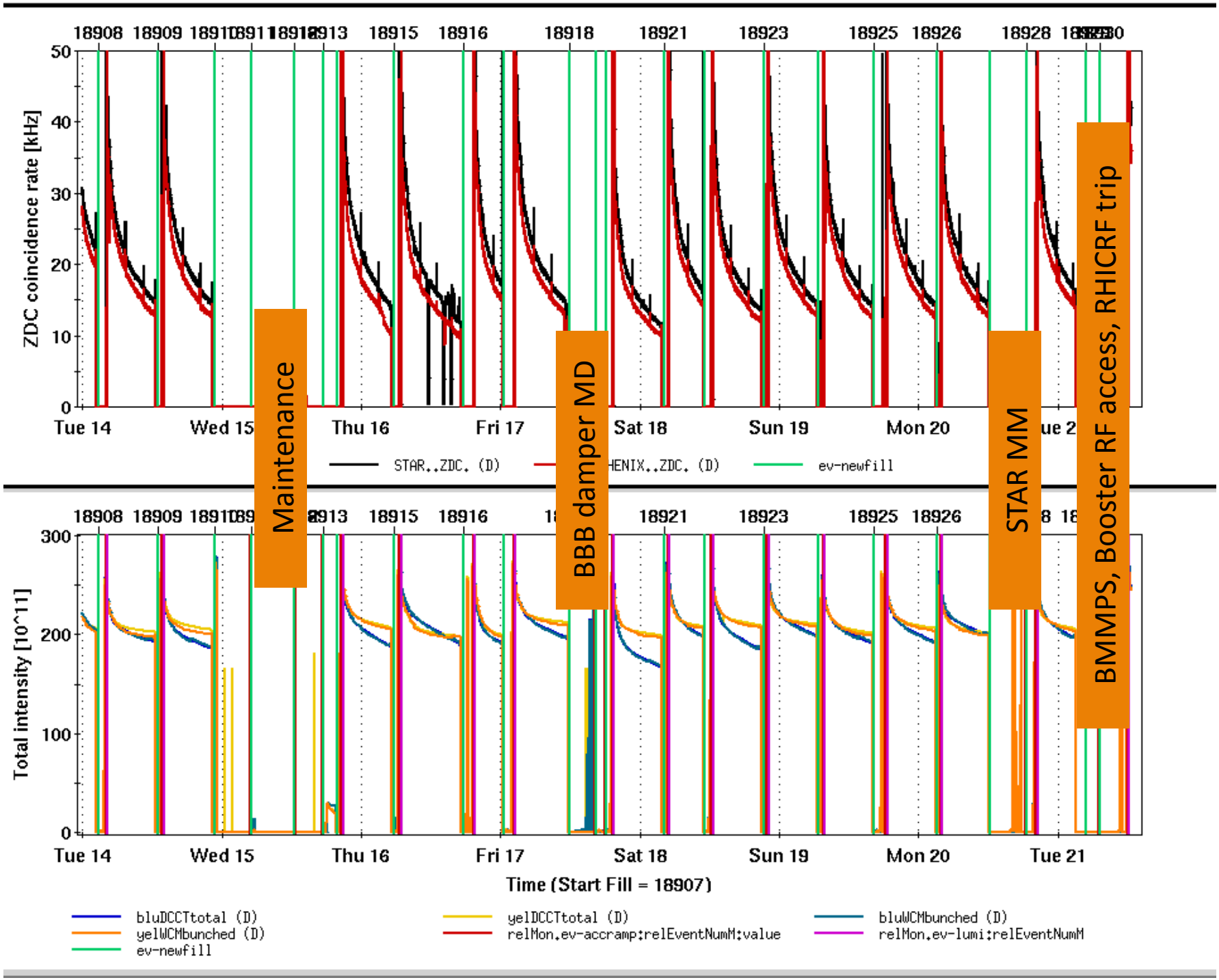
RHIC Status Update

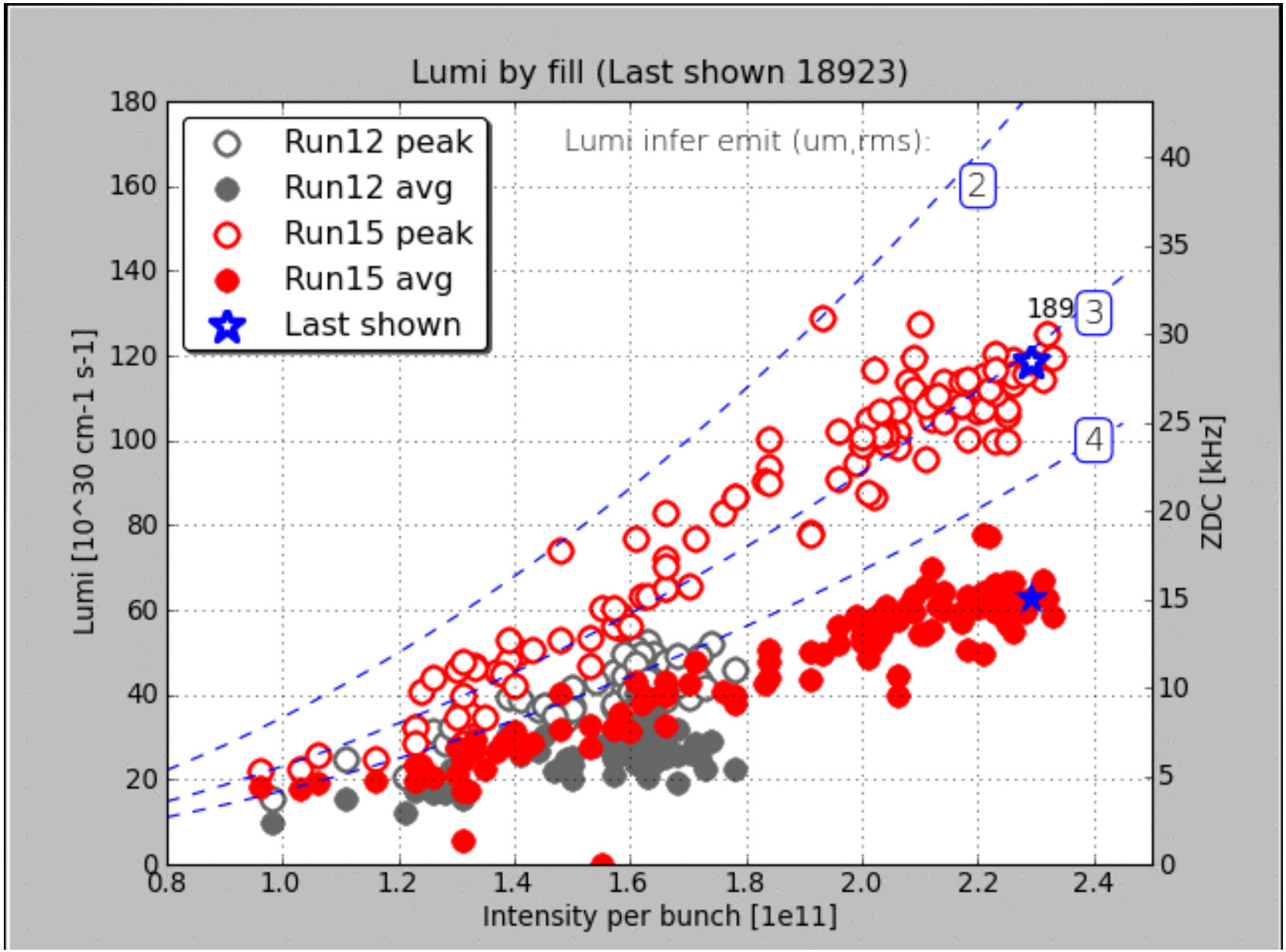


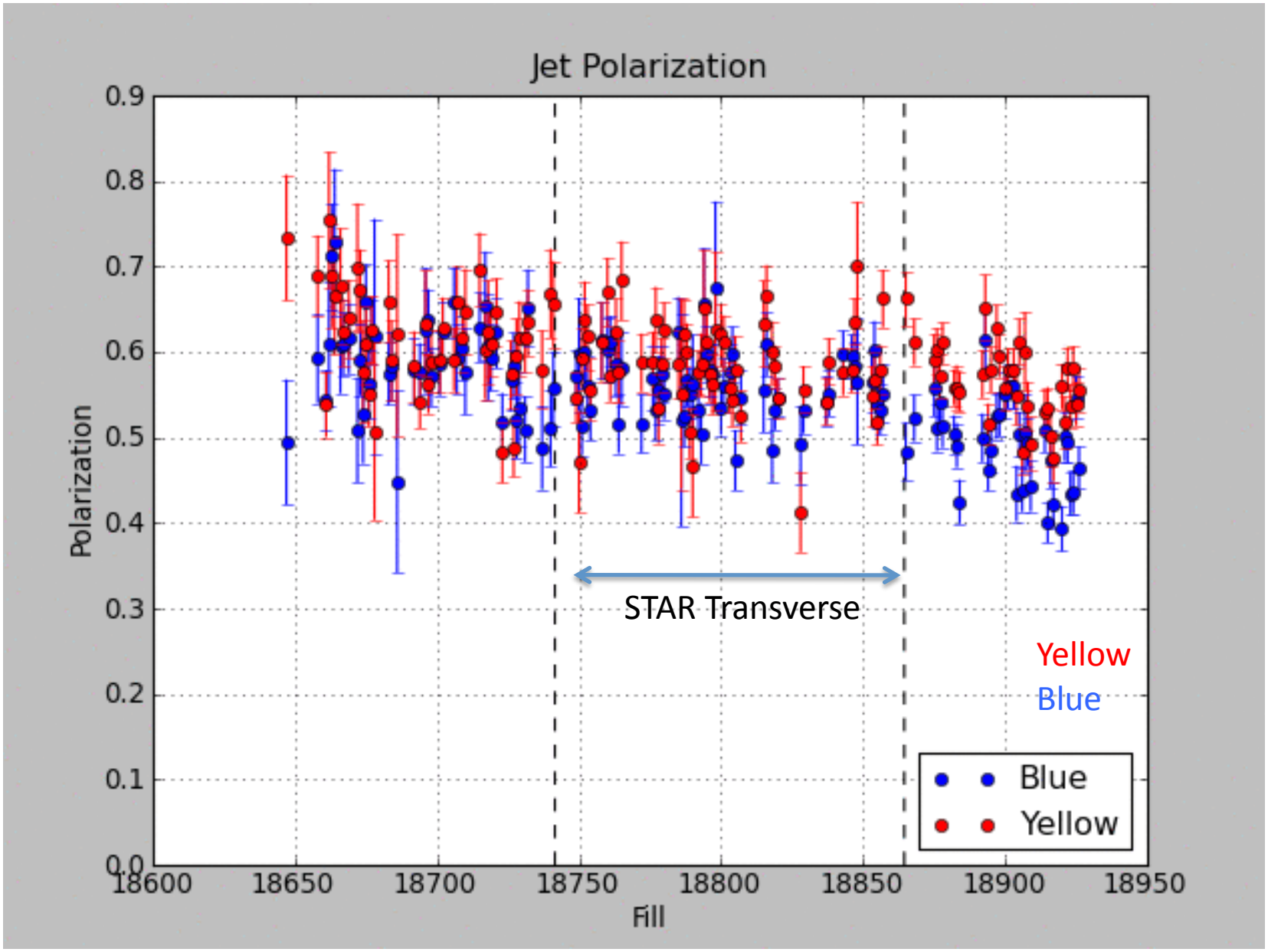
Time Meeting 4/21/15

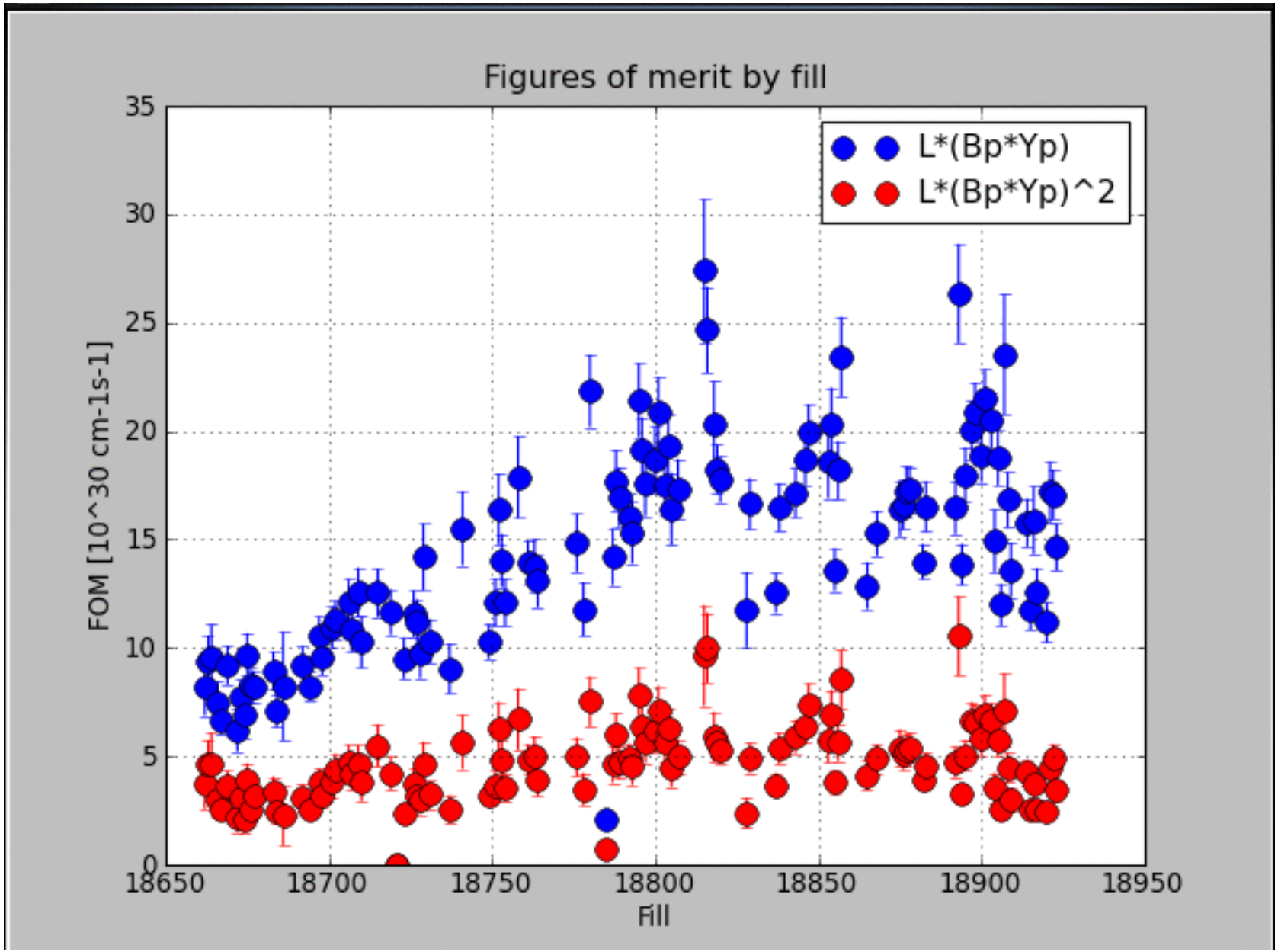
RHIC Status

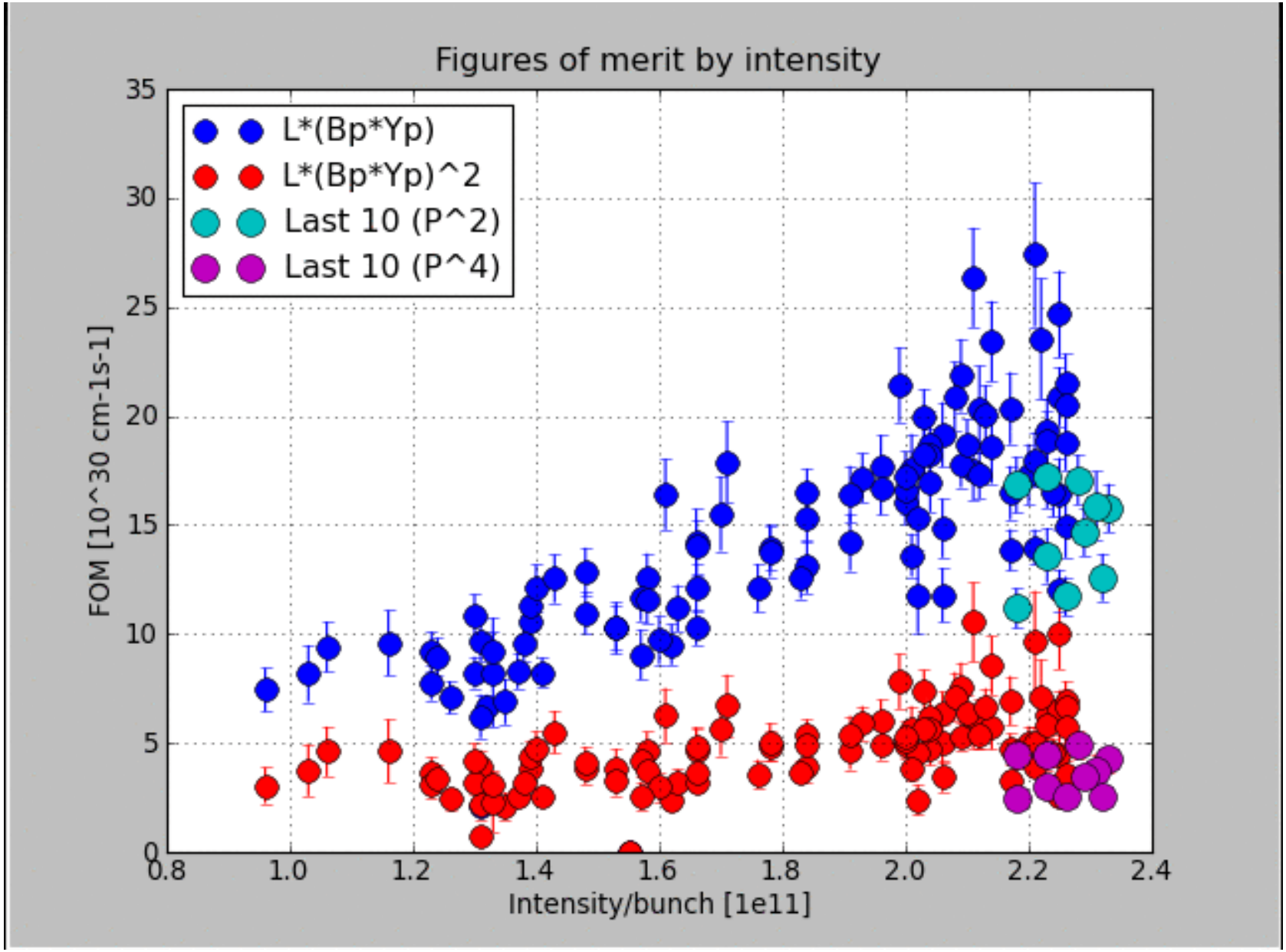
- Polarization problem in the AGS hurting FOM
- Blue polarization store decay continues
  - Changes to snake/rotator currents


ZDC coincidence rate [kHz]
Tue 14
Wed 15
Thu 16
Fri 17
Sat 18
Sun 19
Mon 20
STAR.,ZDC. (D)
ev-newfill
Maintenance
BBB damper MD
STAR MM
BMMPS, Booster RF access, RHICRF trip
Total intensity [10^11]
Tue 21
Time (Start Fill = 18907)
bluDCCTtotal (D)
yelWCMbunched (D)
ev-newfill
yelDCCTtotal (D)
relMon.ev-accramp:relEventNumM:value
bluWCMbunched (D)
relMon.ev-lumi:relEventNumM


Lumi by fill (Last shown 18923)
Run12 peak
Run12 avg
Run15 peak
Run15 avg
Last shown
Lumi infer emit (um,rms):
2
3
4
189
Lumi [10^30 cm-1 s-1]
ZDC [kHz]
Intensity per bunch [1e11]
0
20
40
60
80
100
120
140
160
180
0
5
10
15
20
25
30
35
40
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4


Jet Polarization
Polarization
Fill
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
18600
18650
18700
18750
18800
18850
18900
18950
STAR Transverse
Yellow
Blue
Blue
Yellow


Figures of merit by fill
L*(Bp*Yp)
L*(Bp*Yp)^2
FOM [10^30 cm-1s-1]
Fill
0
5
10
15
20
25
30
35
18650
18700
18750
18800
18850
18900
18950


Figures of merit by intensity
L*(Bp*Yp)
L*(Bp*Yp)^2
Last 10 (P^2)
Last 10 (P^4)
FOM [10^30 cm-1s-1]
Intensity/bunch [1e11]
0
5
10
15
20
25
30
35
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4