

# Time Meeting

April 5, 2016.

W. Christie

Blue Ring Magnet String issue:

- on Friday morning 7am (18 March 2016) a problem developed in the RHIC Blue ring dipole string.
- Tests and analyses over Friday and Saturday concluded that a quench protection diode in dipole bo6-d19 is shorted. This diode is part of the current bypass in case of a magnet quench.
- A plan/schedule was compiled and executed to warm up a section of the Blue Ring, confirm the diagnosis of a faulty diode, open the relevant location, replace the diode, re assemble the location, cool down, and return to beam operations.
- Currently in the process of checking out and testing the RHIC rings with current, and expect to return to beam operations soon (within the next 24 hours).

# Run 16 plan based on 20 weeks cryo operation

and Fischer et.al. RHIC Collider Projections (FY 2016 – FY 2022), 19 April 2015

## Today, April 5<sup>th</sup>

- 19 Jan, Begin cool-down to 4.5K
- 25 Jan, Beam in Yellow
- ~~22~~ 26 Jan, Beam in Blue
- ~~29~~ Jan, Feb 3, First Collisions
- ~~5~~ 7 Feb, Begin 10 week  $\sqrt{s}=200$  GeV/n AuAu physics run
- 7 am March 18<sup>th</sup>, RHIC Operations halted for Blue ring Diode issue
- ~~15~~ 18 April, End 10 week  $\sqrt{s}=200$  GeV/n AuAu physics run
- ~~16~~ 19 April, Begin 1.4 week  $\sqrt{s}=20$  GeV/n dAu physics run
- ~~26~~ 29 April, End 1.4 week  $\sqrt{s}=20$  GeV/n dAu physics run
- 29 April, Begin 1.4 week  $\sqrt{s}=39$  GeV/n dAu physics run
- 9 May, End 1.4 week  $\sqrt{s}=39$  GeV/n dAu physics run
- 12 May, Begin 0.9 week  $\sqrt{s}=62$  GeV/n dAu physics run
- 18 May, End 0.9 week  $\sqrt{s}=62$  GeV/n dAu physics run
- 21 May, Begin 0.9 week  $\sqrt{s}=200$  GeV/n dAu physics run
- 27 May, End 0.9 week  $\sqrt{s}=200$  GeV/n dAu physics run
- 29 May, Begin 5 day  $E=40$  GeV/n Au CEC physics run
- 3 June, End 5 day  $E=40$  GeV/n Au CEC physics run
- 3 June, begin cryo warm-up
- 7 June, cryo warm-up complete, 20.0 cryo weeks of operation

dAu schedule as proposed by PHENIX,  
scaled to 4.7 total physics weeks

- Actual physics time for each energy is TBD

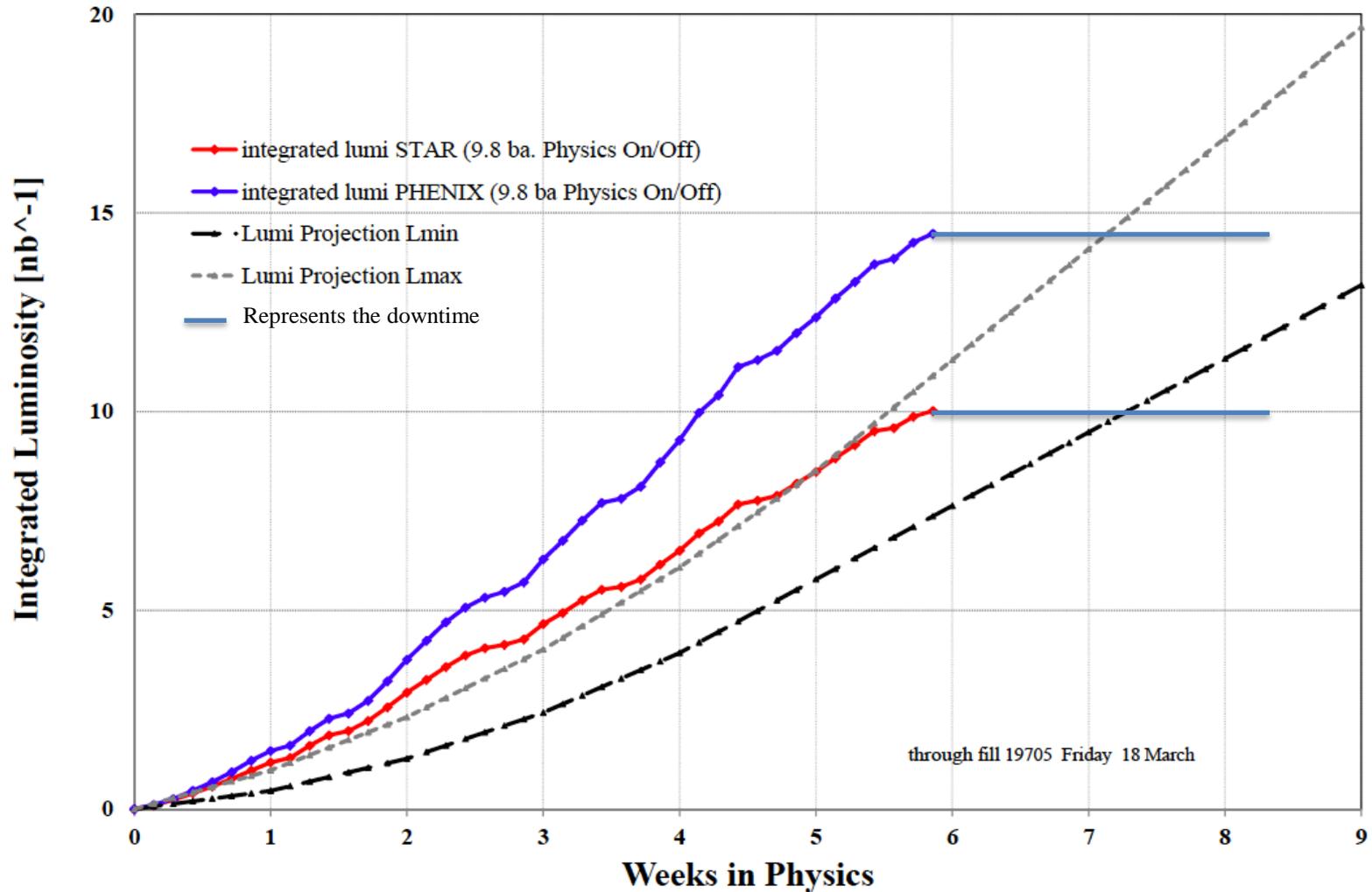
Schedule in Orange  
text not updated yet

Note that there will be discussions on how the Blue Ring Diode issue and downtime impact the rest of the Run 16 Plan/Schedule after we are back up and running the AuAu program.

See <http://www.rhichome.bnl.gov/AP/RHIC2016/> for the Run Coordinator's detailed plan

# Run16 Delivered Luminosity

Au x Au  $\sqrt{s} = 200$  GeV



Delivered Integrated Luminosity through last Physics Fill on Friday March 18th

## **SCHEDULE FOR WEEK FROM MONDAY April 4<sup>TH</sup> – SUNDAY April 10<sup>th</sup>**

- **Monday:**

- Expect Experiment IRs to get swept by about 7 pm or so
- Beam operations expected overnight, likely only at injection
- Experiments Magnets will stay at zero field unless they are requested to ramp them up by the RHIC MCR

**Tuesday:**

- Under the assumption that high current (flat top) testing does not happen/complete on Monday night, these high current tests will be performed/completed starting Monday morning.
  - No scheduled access planned into RHIC (IRs or tunnel)
  - Once the high current tests have been completed, machine setup for Physics will commence. A rough schedule/expectation is that this will start by mid afternoon.
  - Expectation is that the first Physics store will be in RHIC by about midnight.

**Wednesday and through the rest of the week (until Monday):**

- Physics running.

Archive

PHENIX goals: 10 weeks,  $1.8 \text{ nb}^{-1}$  with 12 billion MB events recorded within  $|z| < 10 \text{ cm}$  vertex, request dynamic  $\beta^*$  squeeze.

STAR goals: 13 weeks  $10 \text{ nb}^{-1}$  sampled for MTD and 2 billion MB events recorded within  $|z| < 6 \text{ cm}$  for HFT

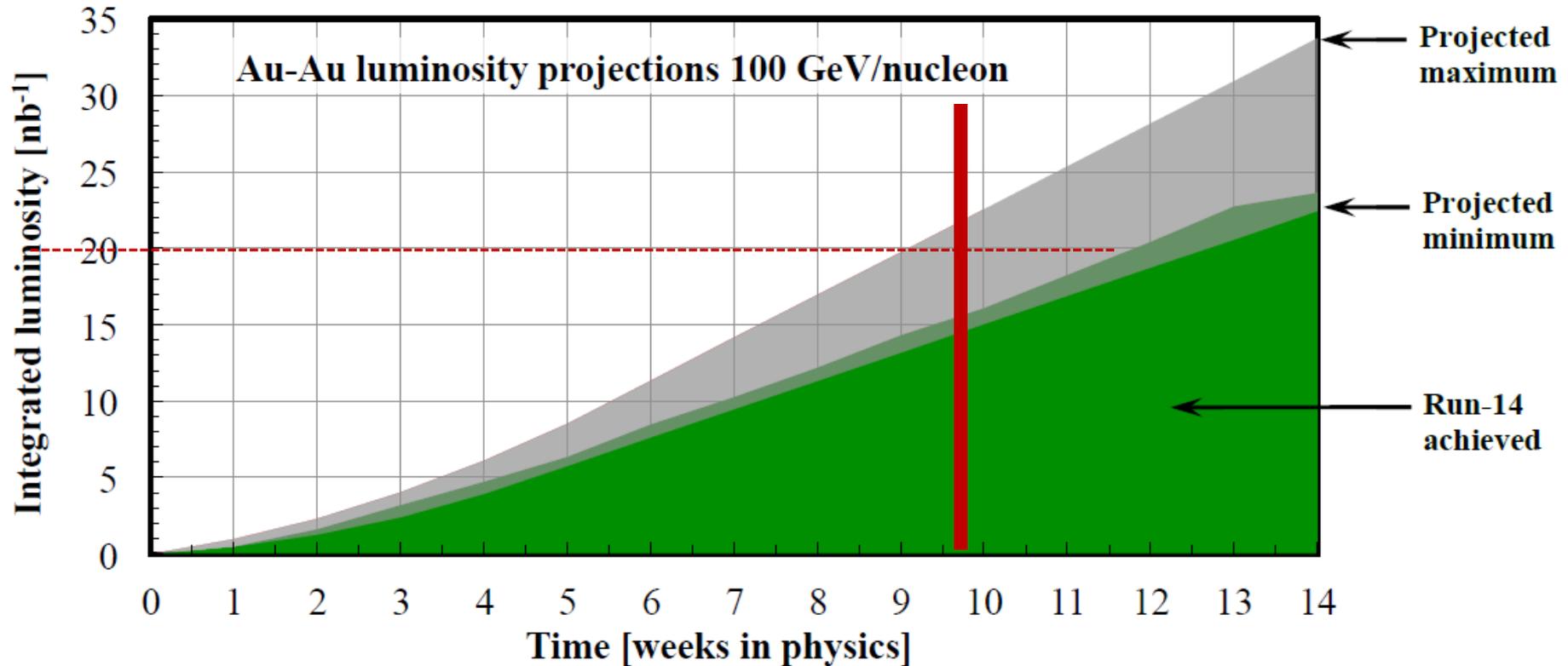
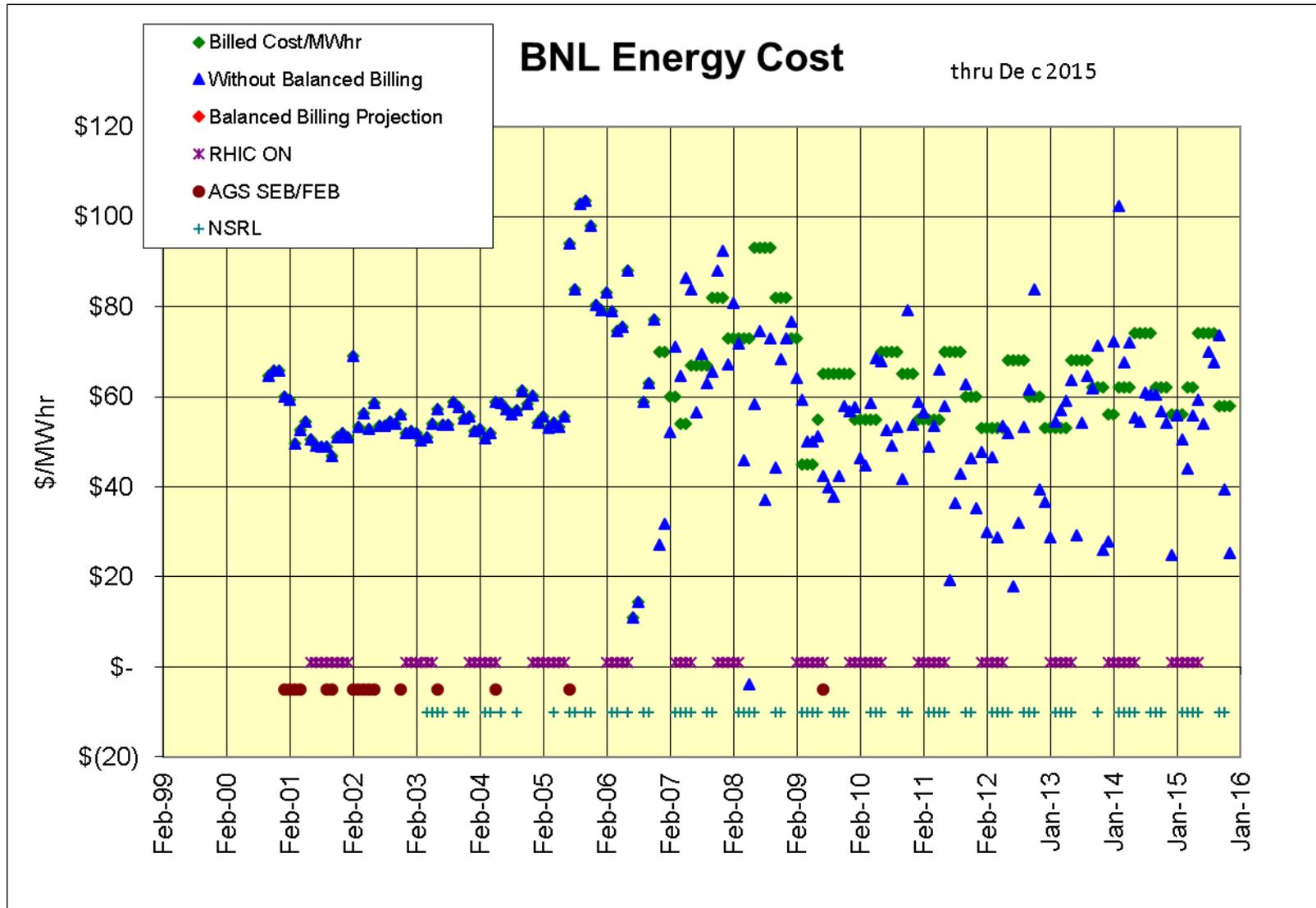


Figure 3: Projected minimum and maximum integrated luminosities for Au+Au collisions at 100 GeV/nucleon beam energy, assuming linear weekly luminosity ramp-up in 6 weeks.

From Fischer et. al., RHIC Collider Projections (FY 2016 – FY 2022), 19 April 2015



# Balanced Billing for the lab +\$683K (ahead) Sep through Dec 2015



## Who's Who for 2016

RHIC 100 x 100 GeV AuAu:

**Run Coordinator:** Xiaofeng Gu, [xgu@bnl.gov](mailto:xgu@bnl.gov) , 631-344-4724

RHIC dAu Energy Scan:

**Run Coordinator:** Chuyu Liu, [cliu1@bnl.gov](mailto:cliu1@bnl.gov) , 631-344-4431

RHIC CeC POP Experiment:

**Run Coordinator:** TBD

**Scheduling Physicist:** Bill Christie, [christie@bnl.gov](mailto:christie@bnl.gov), 631-344-7137 (x4643 after 29 Jan)

Assistant Scheduling Physicists through 29 Jan:

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**AGS Liaison:**

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