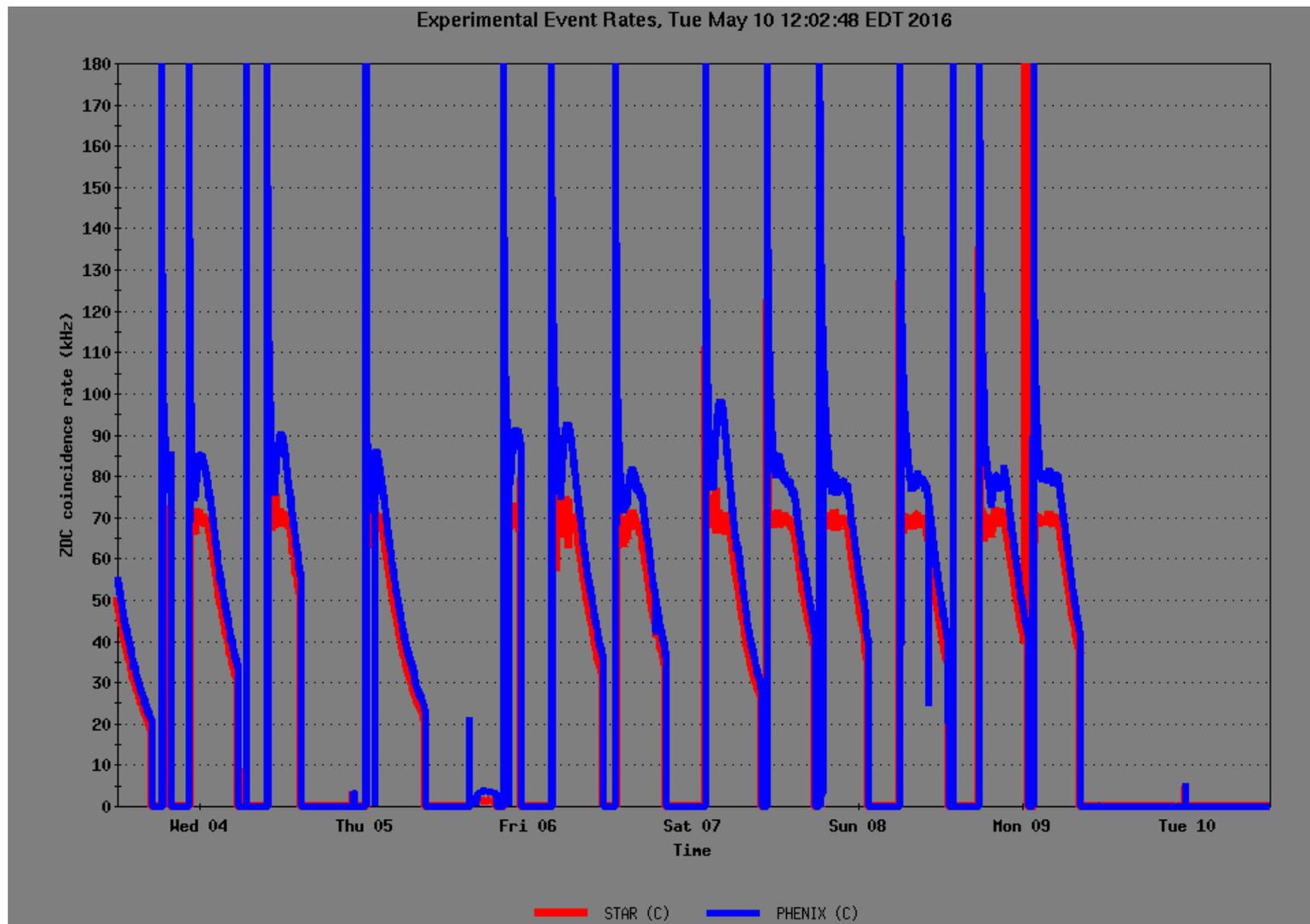


Time Meeting

May 10, 2016.

W. Christie



Run 16 plan based on 20 weeks cryo operation

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

Today, May 10th

- 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 18th, RHIC Operations halted for Blue ring Diode issue
- 7 pm April 6th, RHIC Operations resumed (19.5 days offline)
- Decision made to add 19.5 days to the AuAu running to account for the Diode related down time
- 9 May, End 10 week (+ 2 days) $\sqrt{s}=200$ GeV/n AuAu physics run
- ~ 12 May, Begin 1 week $\sqrt{s}=200$ GeV/n dAu physics run
- 19 May, End 1 week $\sqrt{s}=200$ 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
- 20 June, Begin 7 day $E=40$ GeV/n Au CEC physics run
- 27 June, End 7 day $E=40$ GeV/n Au CEC physics run
- 27 June, begin cryo warm-up
- 1 July, Cryo warm-up complete, 23.5 cryo weeks of operation

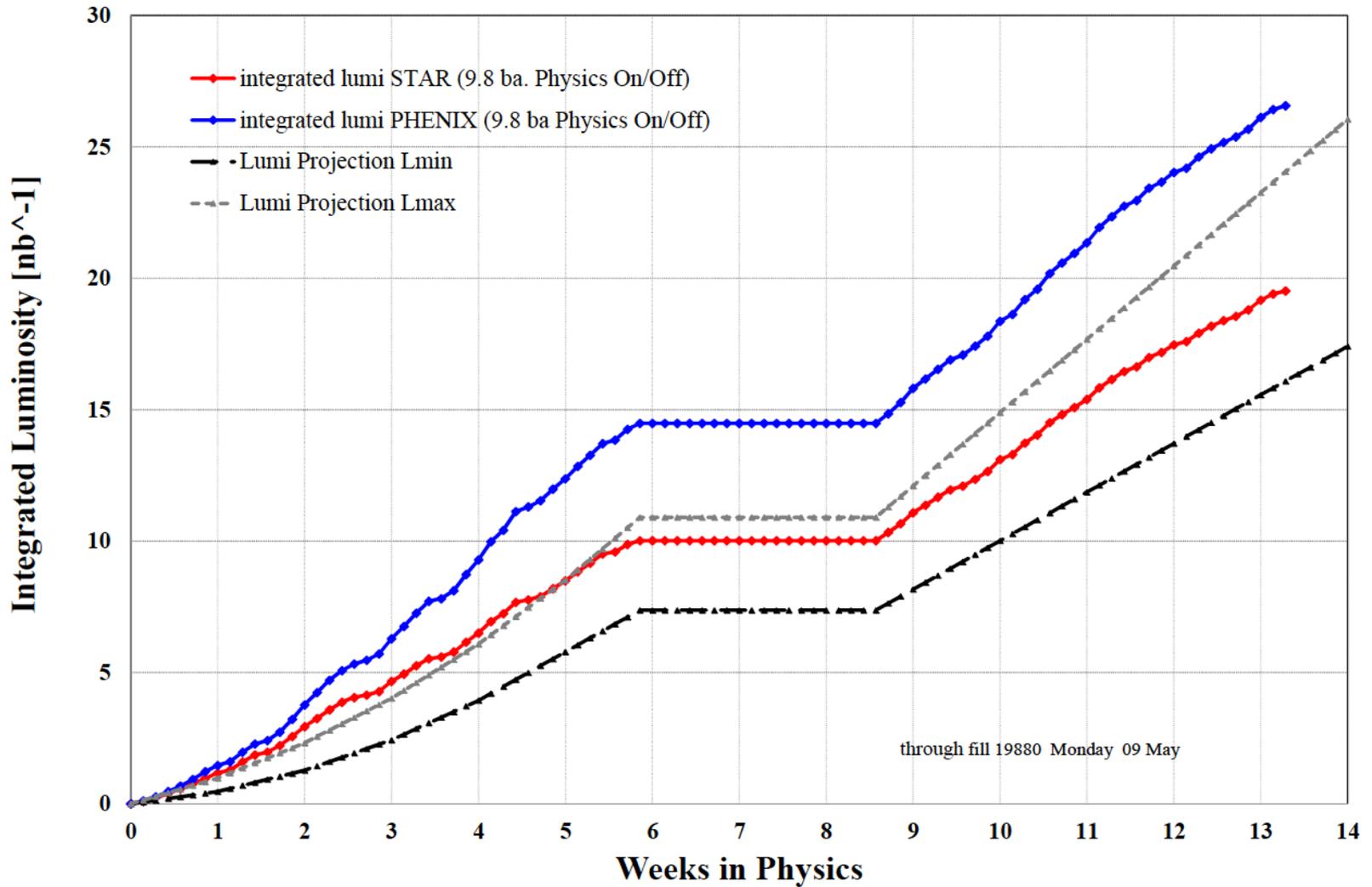
• Actual physics time for each dAu energy is TBD

Schedule in Magenta is estimate
Schedule in Orange text not updated yet
Schedule in Blue text assumes CeC runs as planned

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



Final Luminosity values for 200 GeV AuAu Run

SCHEDULE FOR WEEK FROM MONDAY May 9th – MONDAY May 16th

- **Monday:**
 - AuAu run ends at 8 am
 - Access 8 am to ~ 5 pm (end of access driven by PHENIX Drift Chamber repair)
 - ~ 5 pm and extending overnight, collider commissioning in the Blue beam with deuterons. STAR and PHENIX magnets remain OFF.
- **Tuesday:**
 - Blue beam commissioning until 7 am
 - Access from 7 am to 5 pm (Experiments swept by ~4 pm) for Yellow ceramic pipe work.
 - STAR and PHENIX magnets will be ON coming out of the access, and remain on.
 - 5 pm on, Collider commissioning with both Au in Yellow and d in Blue.
- **Wednesday:**
 - Some possibility of overnight collisions for use by the experiments
 - Through the day and evening, Collider commissioning continues
- **Thursday:**
 - High probability of overnight collisions for use by the experiments for timing and setup.
 - Mix of collider commissioning and Physics running, with transition to Physics expected sometime during Thursday.
- **Friday until Monday:**
 - Physics running

Archive

The Calendar

| January | | | | | | |
|---------|----|----|----|----|----|----|
| Su | Mo | Tu | We | Th | Fr | Sa |
| | | | | | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | | | | | | |

| February | | | | | | |
|----------|----|----|----|----|----|----|
| Su | Mo | Tu | We | Th | Fr | Sa |
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 |
| 28 | 29 | | | | | |

| March | | | | | | |
|-------|----|----|----|----|----|----|
| Su | Mo | Tu | We | Th | Fr | Sa |
| | | 1 | 2 | 3 | 4 | 5 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 27 | 28 | 29 | 30 | 31 | | |

| April | | | | | | |
|-------|----|----|----|----|----|----|
| Su | Mo | Tu | We | Th | Fr | Sa |
| | | | | | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |

| May | | | | | | |
|-----|----|----|----|----|----|----|
| Su | Mo | Tu | We | Th | Fr | Sa |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 | | | | |

| June | | | | | | |
|------|----|----|----|----|----|----|
| Su | Mo | Tu | We | Th | Fr | Sa |
| | | | 1 | 2 | 3 | 4 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 26 | 27 | 28 | 29 | 30 | | |

- Cool down to 4.5K starts on January 19th.
- Physics Running Declared on Sunday February 7th.
- Physics Running halted by Diode at 7 am on Friday March 18th
- ~ 5 5/7's weeks
- Physics running restarted on Wednesday evening, April 6th.
- Gap of ~ 19.5 days
- Original "10 wks" of AuAu physics running would have been concluded on Sunday April 17th.
- If one adds 19.5 days to this original end date, one land on Saturday May 7th.
- Without any extension, the Cryo warm up completes on June 7th.
- *Shown in Magenta is where the CeC running would fall with A TWO WEEK EXTENSION.*
- Original date for the start of the Cryo warm up was Friday, June 3rd.
- 20 Cryo weeks total.

Outcome from the April 12th RHIC Coordination meeting

- A decision that was taken at the meeting was that the earliest end date for the AuAu running would be pushed from April 17th (original end date for 10 weeks of physics running) to the vicinity of May 7th. This accounts for the 19.5 days that RHIC was offline for the diode repair.
- Extending Run 16. Given the funds saved from the reduced power load during the three weeks that RHIC was offline, and the lower cost for power through February of this year (March Power costs not yet known), the funds were deemed to be available to extend the run by at least two weeks.
- Depending on the power cost for March, it may be possible to add an additional week to the run, making for a total of a three week extension. It is expected that the power cost for March will be known soon (this week) and thus a final decision of the length of a possible run extension will be made by/at the RHIC Coordination meeting on April 26th.
- To better understand the implications of the possible options for allocating the RHIC beam time between May 7th (earliest end of AuAu running) and the end date for the run, Berndt asked both collaborations to provide him with input to specific questions.
- The date for detailing all aspects of the plan for the remainder of Run 16 is by or on April 26th.

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

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

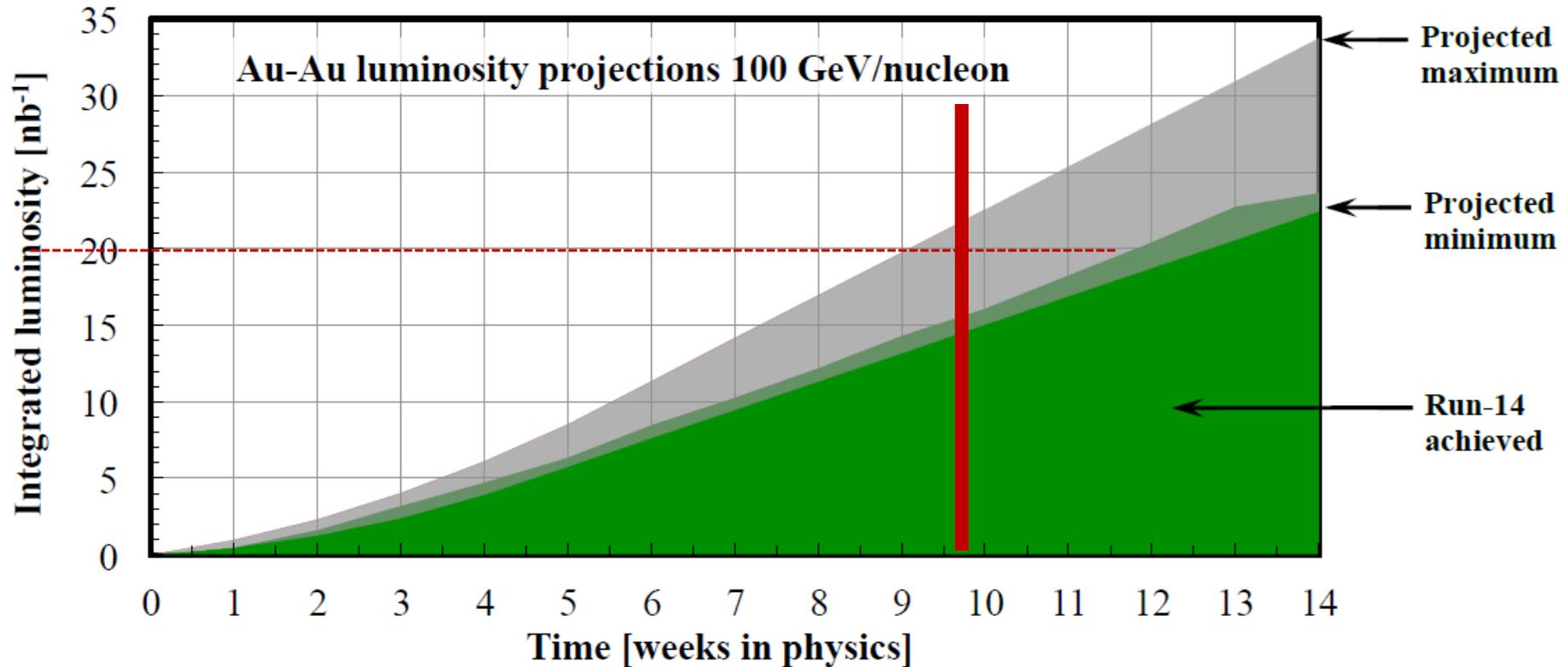


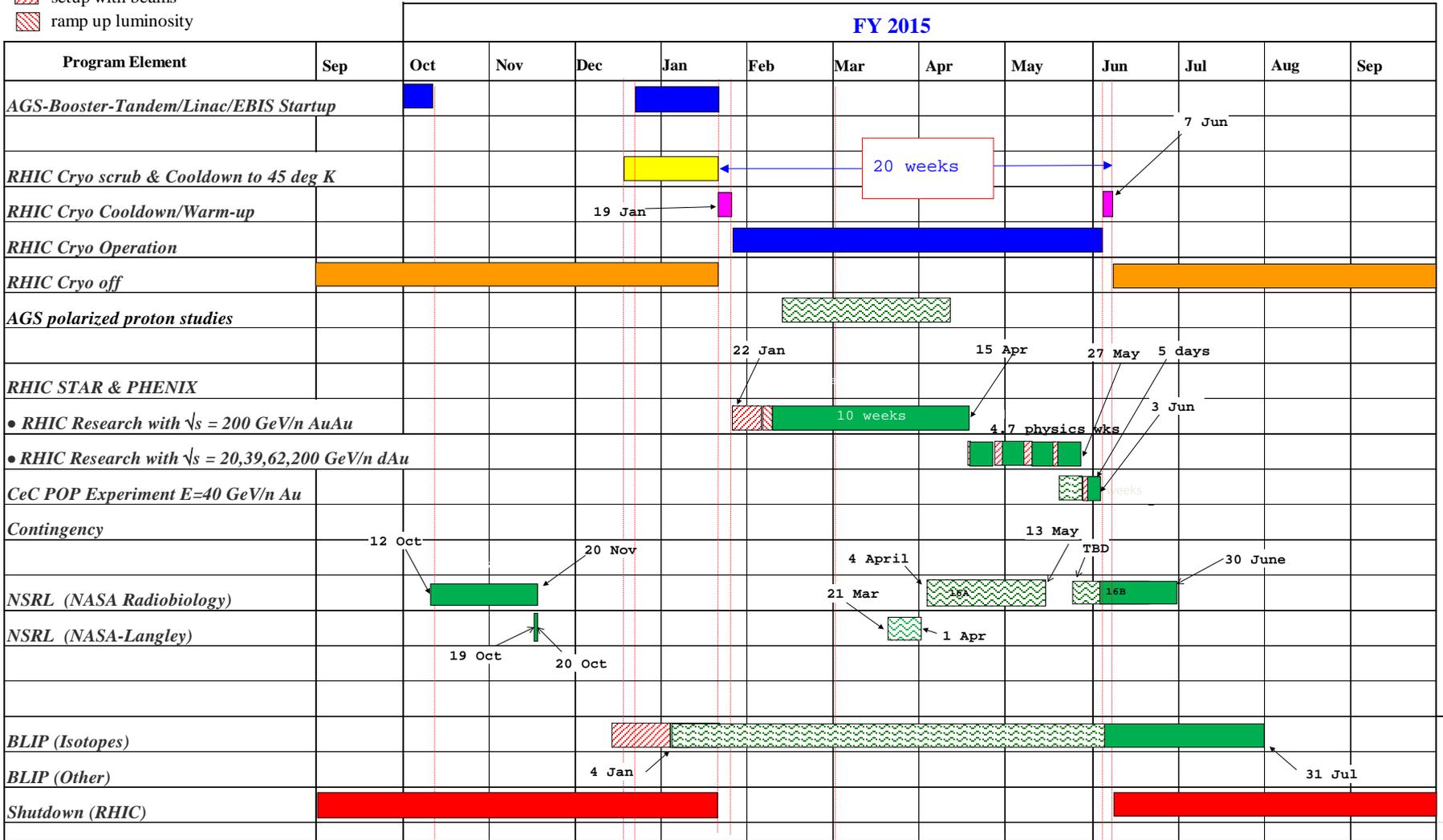
Figure 3: Projected minimum and maximum integrated luminosities for Au+Au collisions at 100 GeV/nucleon beam energy, assuming linear weekly luminosity ramp-up in 6 weeks.

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

C-A Operations-FY16

planned

-  concurrent with RHIC
-  setup with beams
-  ramp up luminosity



Who's Who for 2016

RHIC 100 x 100 GeV AuAu:

Run Coordinator: Xiaofeng Gu, xgu@bnl.gov , 631-344-4724

RHIC dAu Energy Scan:

Run Coordinator: Chuyu Liu, cliu1@bnl.gov , 631-344-4431

RHIC CeC POP Experiment:

Run Coordinator: TBD

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

AGS Liaison:

Haixin Huang, huanghai@bnl.gov , 631-344-5446