Run 16 RHIC Machine/Experiments Meeting

March 15, 2016

Agenda:

- Summary of the studies of the aperture limit for the d-Au run
  Chuyu Liu
- Reminder that there will be a discussion on the length of the current AuAu running at next weeks meeting. Presentations expected from both experiments.

- AOB

READYTALK LOGIN INFO
Audio Login
Toll-Free (US & Canada): 9.1.866.740.1260
Toll: 303.248.0285
Access Code: 8304505

ReadyTalk link https://core.readytalk.com/interface/guest.jsp?host=readytalk&an=8667401260&ac=8304505

Run 16 plan based on 20 weeks cryo operation

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

Today, 15 March

- 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 **√s=200 GeV/n AuAu** physics run
- ~~15~~ 18 April, End 10 week √s=200 GeV/n AuAu physics run
- ~~16~~ 19 April, Begin 1.4 week **√s=20 GeV/n dAu** physics run
- ~~26~~ 29 April, End 1.4 week √s=20 GeV/n dAu physics run
- 29 April, Begin 1.4 week **√s=39 GeV/n dAu** physics run
- 9 May, End 1.4 week √s=39 GeV/n dAu physics run
- 12 May, Begin 0.9 week **√s=62 GeV/n dAu** physics run
- 18 May, End 0.9 week √s=62 GeV/n dAu physics run
- 21 May, Begin 0.9 week **√s=200 GeV/n dAu** physics run
- 27 May, End 0.9 week √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

- dAu setup time as per Chuyu 1/6/16 email
- Actual physics time for each energy is TBD

Schedule in Orange text not updated yet

Note that there will be a discussion on the length of the current AuAu run at the RHIC Coordination mtg on March 22nd.

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

http://www.bnl.gov/cad/esfd

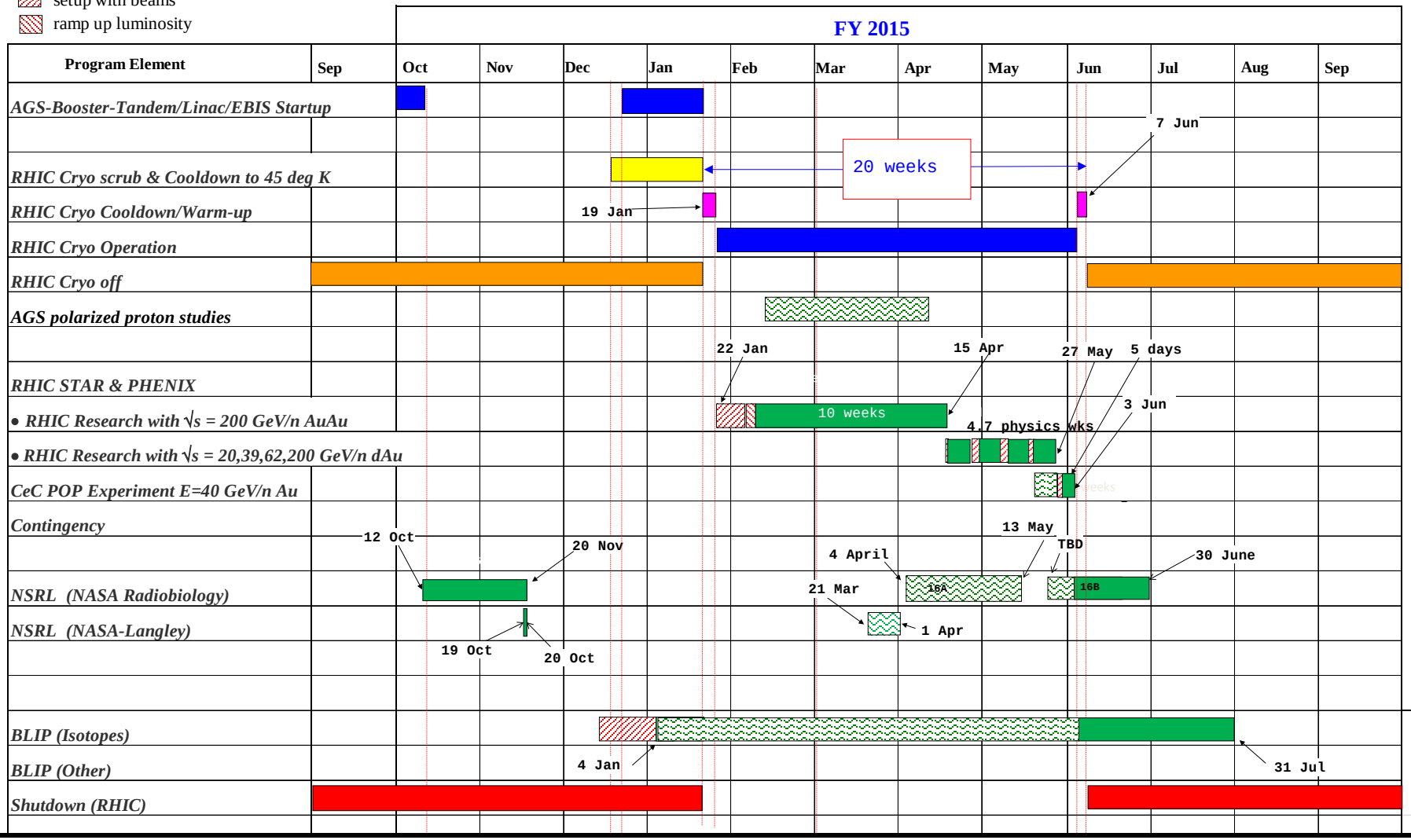
Scheduling Physicist: Christie

C-A Operations-FY16

14 Jan 16

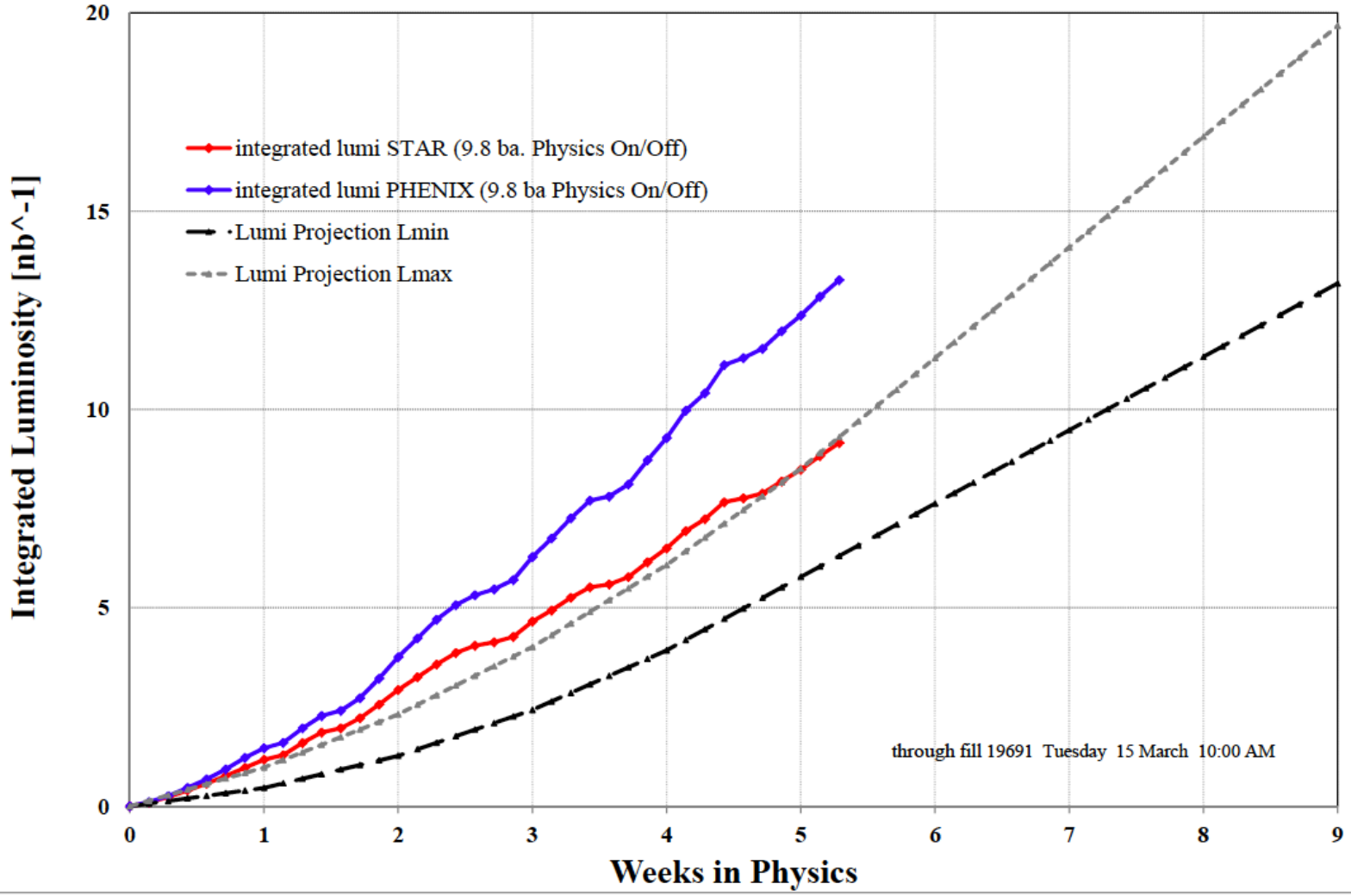
planned

concurrent with RHIC
setup with beams
ramp up luminosity



Archive

Run16 Delivered Luminosity
Au x Au $\sqrt{s}$ = 200 GeV



SCHEDULE FOR WEEK FROM MONDAY March 15TH – SUNDAY MAR. 20TH

MONDAY:

- PHYSICS RUNNING

TUESDAY:

- PHYSICS RUNNING

WEDNESDAY:

- PHYSICS RUNNING UNTIL 7:45 AM
- SCHEDULED MAINTENANCE from 8 am to 4 pm
- RECOVER RHIC and PHYSICS RUNNING, 4 pm on

THURSDAY:

- PHYSICS RUNNING UNTIL 9:45 AM
- MACHINE DEV. From 10 am to 1 pm for Model Corrections
- MACHINE DEV. From 1 pm to 3 pm for 56 MHz
- PHYSICS RUNNING 3 PM ON

FRIDAY:

- PHYSICS RUNNING

SATURDAY AND SUNDAY:

- PHYSICS RUNNING

PHENIX goals: 10 weeks, 1.8 nb^{-1} with 12 billion MB events recorded within |z|< 10 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 cm for HFT

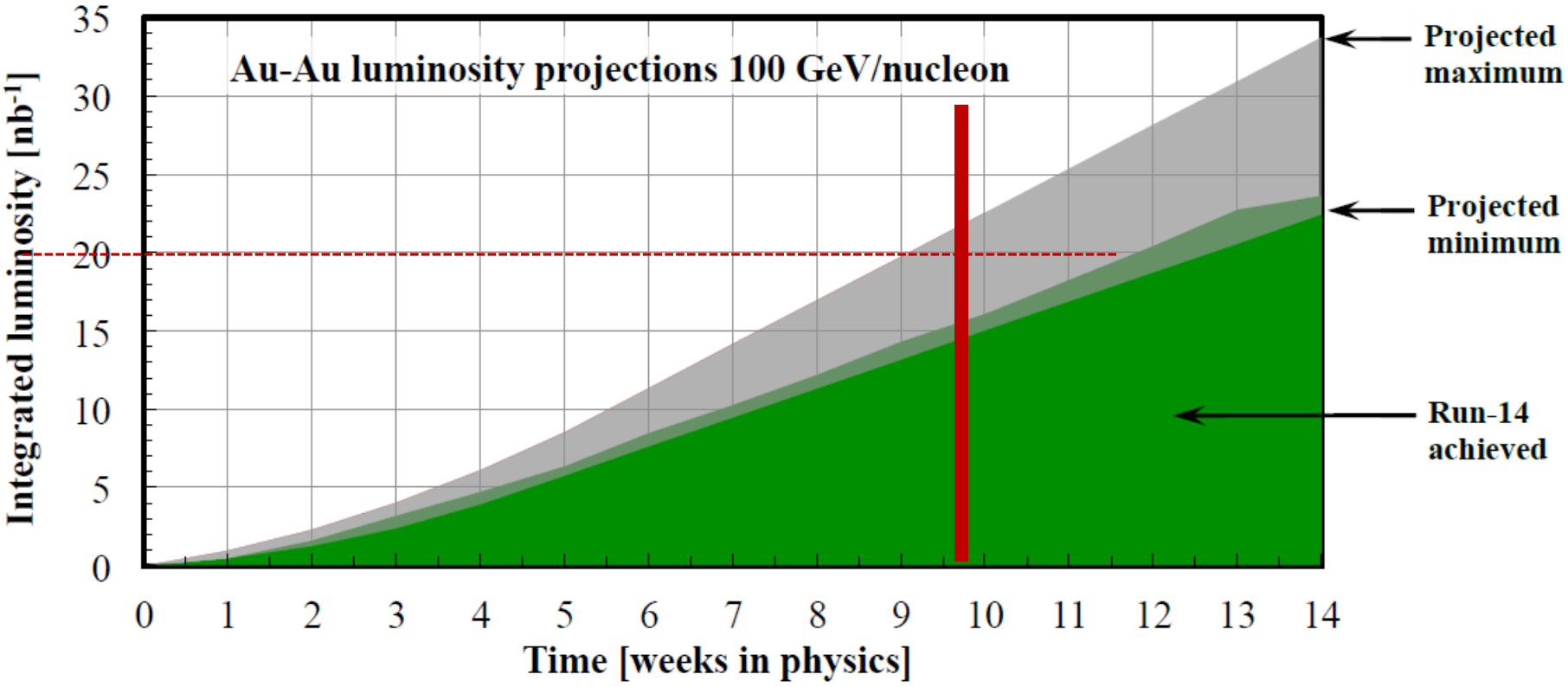
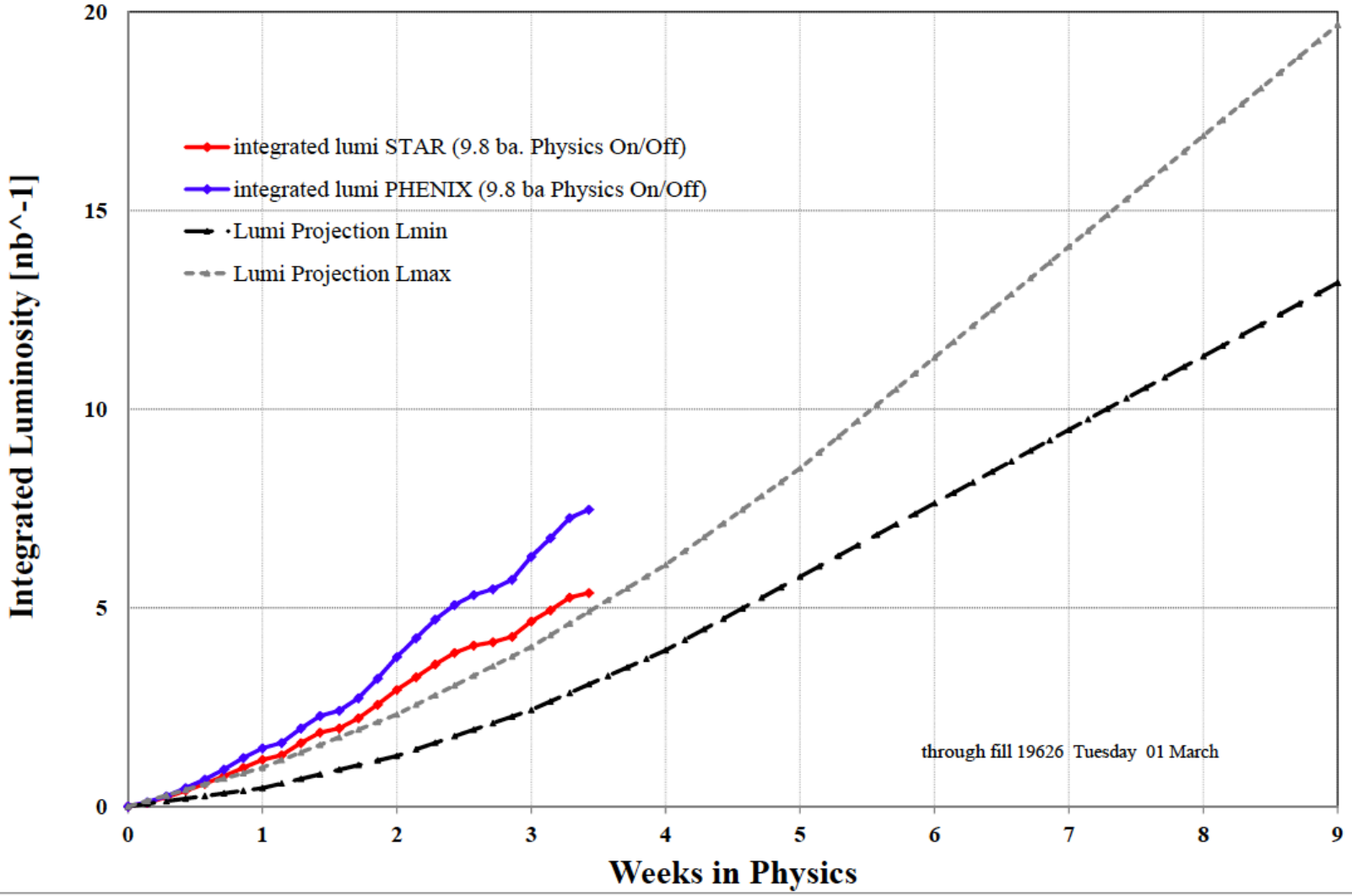


Figure 3: Projected minimum and maximum integrated luminosities for Au+Au collisions at 100 GeV/nucleon beam energy, assuming linear weekly luminosity ramp-up in 6 weeks.

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

Run16 Delivered Luminosity
Au x Au $\sqrt{s}$ = 200 GeV



SCHEDULE FOR WEEK FROM MONDAY FEB. 29TH – SUNDAY MAR. 6TH

MONDAY:

- PHYSICS RUNNING

TUESDAY:

- PHYSICS RUNNING until 10:50 am
- RHIC RING ACCESS FROM 11 AM TO 12:30 PM FOR CEC
    - PHENIX AND STAR ALSO GO INTO IRS
- PHYSICS RUNNING FROM 12:30 PM ON

WEDNESDAY:

- PHYSICS RUNNING UNTIL 7:45 AM
- SCHEDULED ACCESS 8 AM TO 4 PM
- 4 PM ON, PHYSICS RUNNING

THURSDAY:

- PHYSICS RUNNING UNTIL 9 AM
- BEAM DEV. 9 AM TO 7 PM (56 MHZ, XFER FTN. CORRECTION, S*, CEC APERATURE SCAN)
- PHYSICS RUNNING 7 PM ON

FRIDAY THROUGH WEEKEND:

- PHYSICS RUNNING

Who's Who for 2016

RHIC 100 x 100 GeV AuAu:
Run Coordinator: Xiaofeng Gu, xgu@bnl.gov , 631-344-5446 (office)

RHIC dAu Energy Scan:
Run Coordinator: Chuyu Liu, cliu1@bnl.gov , 631-344-4431 (office)

Scheduling Physicist: Bill Christie, christie@bnl.gov, 631-344-7137
Assistants through 29 Jan:
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Phil Pile, pile@bnl.gov, 631-344-4643 (office), 631-834-2005 (cell)

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