

Run 16 RHIC Machine/Experiments Meeting

June 14, 2016

Agenda:

- A draft schedule for the remainder of Run 16, with a return to 200 GeV/n AuAu
 - B. Christie
- AOB

READYTALK LOGIN INFO

Audio Login

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Run 16 plan based on 23.5 weeks cryo operation

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

Today, June 15th

- 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 **$v_s=200$ 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) $v_s=200$ GeV/n AuAu physics run
- 12 May, Begin 1 week **$v_s=200$ GeV/n dAu** physics run
- 20 May, End ~ 1 week $v_s=200$ GeV/n dAu physics run
- 21 May, Begin 1 week **$v_s=62$ GeV/n dAu** physics run
- 27 May, End ~ 1 week $v_s=62$ GeV/n dAu physics run
- 28 May, Begin 1.5 week **$v_s=19.6$ GeV/n dAu** physics run
- 8 June, End 1.5 week $v_s=19.6$ GeV/n dAu physics run
- 10 June, Begin 1 week **$v_s=39$ GeV/n dAu** physics run
- 17 June, End 1 week $v_s=39$ GeV/n dAu physics run
- 19 June, Begin ~ 7 day **Return to 200 GeV/n AuAu** physics run
- 27 June, End of 200 GeV/n AuAu physics run
- 27 June, begin cryo warm-up
- 1 July, Cryo warm-up complete, 23.5 cryo weeks of operation

Schedule in Orange text not updated yet

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

Draft Schedule for the Remainder of RHIC Run 16

- At the weekly RHIC Scheduling mtg on Monday afternoon, June 13th, we tried to gather all known requests/needs for time between now and the start of the Cryo warm up scheduled for 8 am on Monday June 27th.
- Non “Physics” time requests are:
 - 8 hrs for Diode testing (RHIC cold but no beam)
 - A 4 hr and 8 hr request for 56 MHz effort (RHIC cold but no beam)
 - CeC requests for:
 - 3 hrs on June 16th (in schedule as 1 to 3 hrs)
 - 6 hrs during Switchover Access (scheduled for June 17th)
 - 2 hrs on Monday June 20th for cathode swap
 - 6 hrs for dedicated running (RHIC cold but no beam, scheduled for June 22nd)
 - 1 hr access to change cathodes (scheduled for June 23rd)
 - 12 hrs of dedicated CeC running (RHIC cold, no beam, schedule for June 24th)
- This draft schedule calls for the one week of 39 GeV dAu running to end at 8:45 am on Friday June 17th (started 10 am Friday June 10th). PHENIX estimates that they'll be a bit over 80% of their 39 GeV goals at this point.
- As scheduled, this draft schedule would give the equivalent of about 7 days of Physics running for the 200 GeV AuAu program.

SCHEDULE FOR WEEK FROM MONDAY June 13th – MONDAY June 20th

- **Monday (June 13th):**
 - Physics running
- **Tuesday:**
 - Physics running all day (E6 in Booster repaired behind RHIC store)
- **Wednesday:**
 - Physics running until 7:45 am
 - APEX from 8 am to midnight
- **Thursday:**
 - Physics running until about 8 am
 - 1 to 3 hour access for CeC (Jet access in parallel)
 - Physics running rest of the day
- **Friday**
 - Physics running until 8:45 am
 - 6 to 8 hrs of Access (switchover plus 4 hrs of 56 Mhz request)
 - Start of commissioning for 200 GeV/n AuAu running
- **Saturday**
 - Estimate is that “Physics” running will be declared after ~24 hrs of commissioning
- **Sunday**
 - Physics running all day

SCHEDULE FOR WEEK FROM MONDAY June 20th – MONDAY June 27th

- **Monday (June 20th):**
 - Physics running
 - 2 hrs CeC access (swap cathode)
 - Physics running rest of day
- **Tuesday:**
 - Physics running all day
- **Wednesday:**
 - Physics running until 9:45 am
 - Dedicated CeC running (no beam in RHIC) from 10 am to 4 pm (some diode checking in parallel)
- **Thursday:**
 - Physics running essentially all day
 - 1 hour access for CeC to change cathodes
- **Friday**
 - Physics running until 7:45 am
 - 8 am to 8 pm, 12 hrs of dedicated CeC running (no beam in RHIC)
 - Diode checking and 56 MHz in parallel
 - Physics running rest of day
- **Saturday**
 - Physics running all day
- **Sunday**
 - Physics running all day
- **Monday (June 27th):**
 - Physics running until 7:45 am
 - **Beam Operations cease for Run 16. Cryo warm up begins**

Archive

| June | | | | | | |
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| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
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| 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 Estimate is that "Physics" running declared ~ 8 pm |
| 19 | 20 2 hr CeC access | 21 | 22 6 hr CeC running | 23 2 hr CeC access | 24 12 hr CeC running | 25 |
| 26 | 27 Beam Operations end at 7:45 am Cryo warm up begins | 28 | 29 | 30 | | |

The Calendar

| January | | | | | | |
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| April | | | | | | |
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| May | | | | | | |
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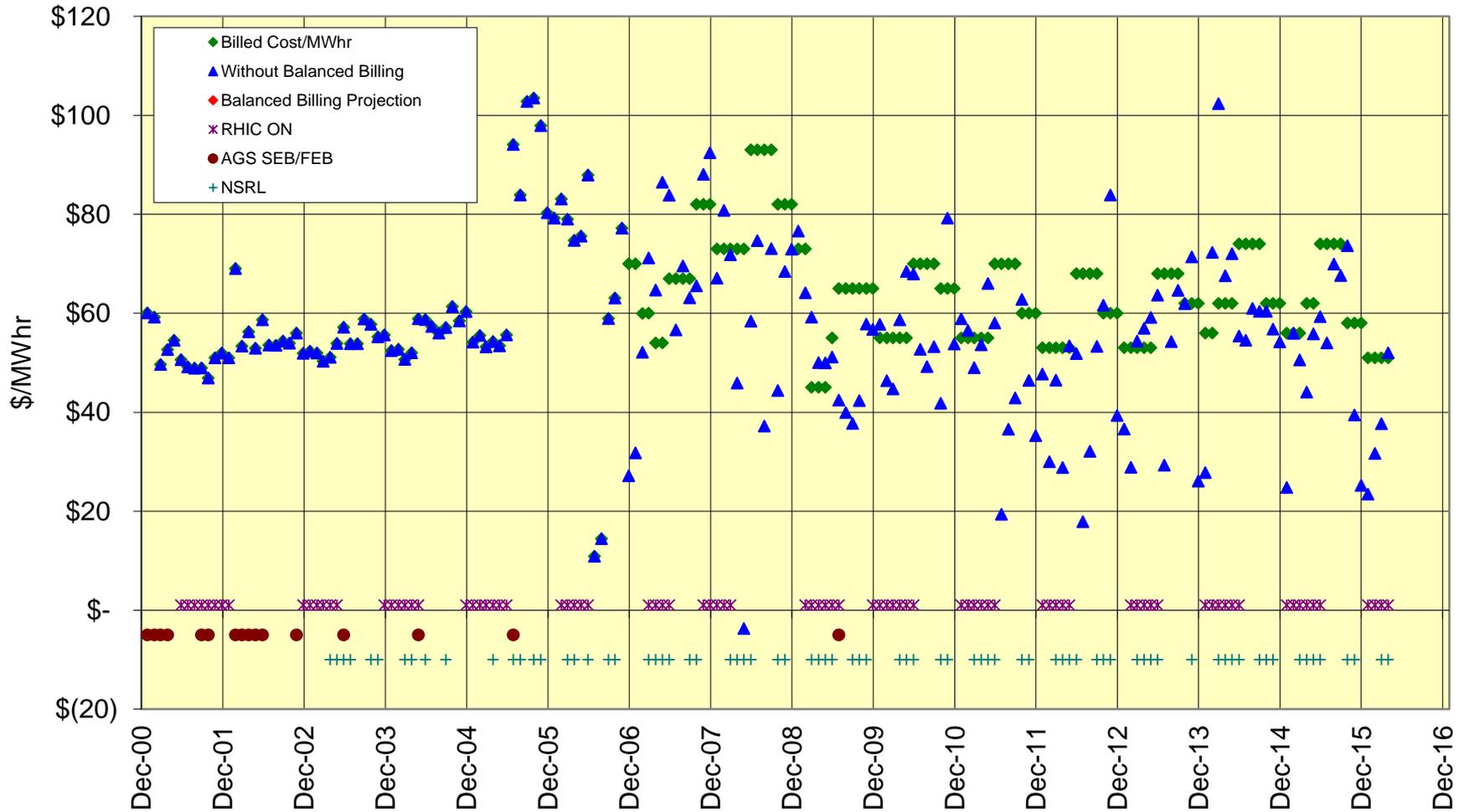
| June | | | | | | |
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| 26 | 27 | 28 | 29 | 30 | | |

- 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
- 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.
- Adding 21.5 days to this original end date, one lands on Monday May 9th.
- Start of 200 GeV dAu Physics run May 12th.
- End of 200 GeV dAu on May 20th.
- Start of 62 GeV dAu on May 21st.
- End of 62 GeV dAu on May 27th.
- Start of 19.6 GeV on May 28th.
- End of 19.6 GeV on June 6th.
- Start of 39 GeV dAu on June 7th
- End of 39 GeV dAu on June 13th.
- With 3.3 week extension, Cryo warm up will start on Monday June 27th
- Shown in Magenta is the CeC running.

Balanced Billing for the lab +\$2247K (ahead) Sep through Apr 2016

BNL Energy Cost

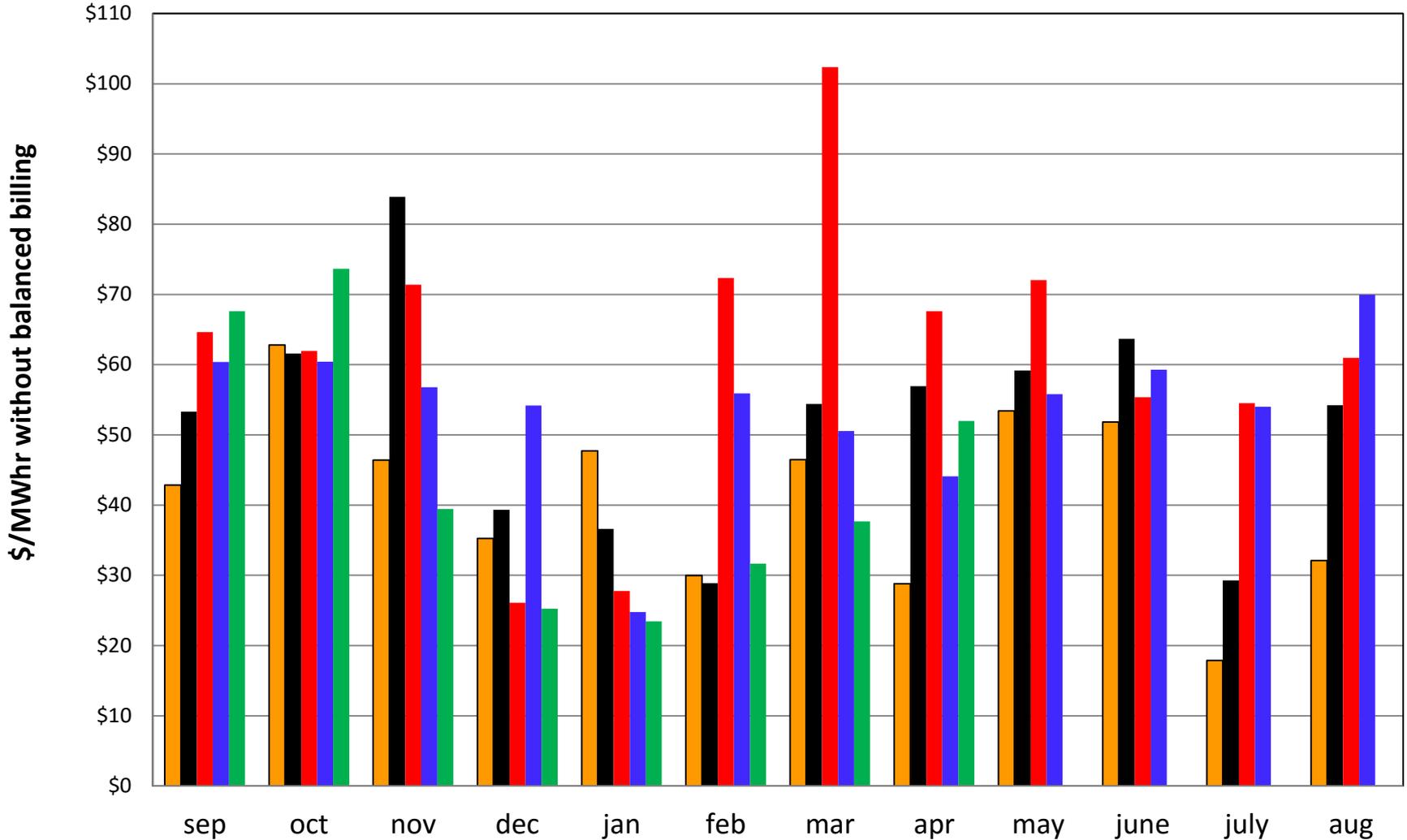
thru April 2016



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BNL Electricity Cost

2012 2013 2014 2015 2016

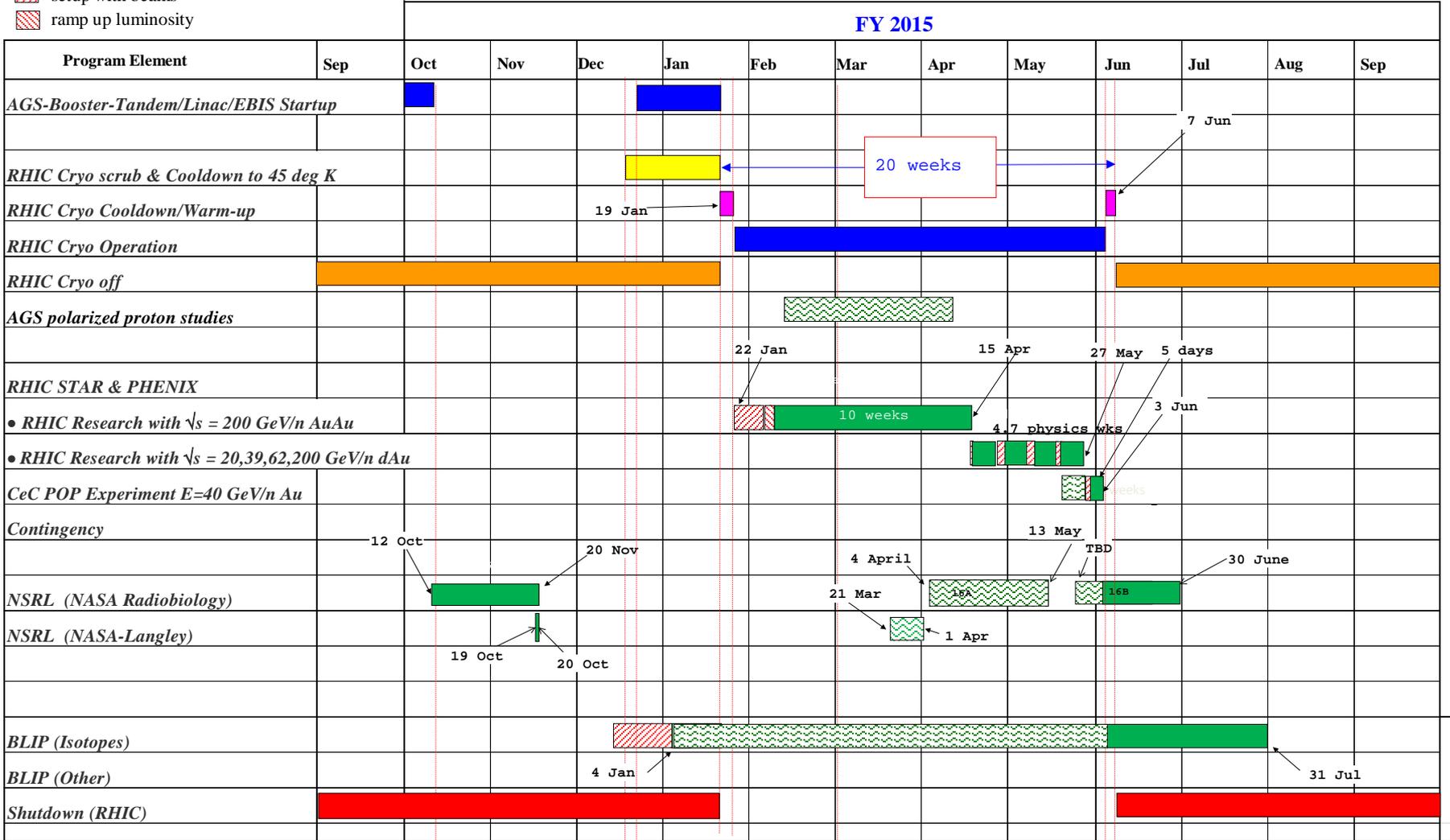


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C-A Operations-FY16

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

planned



Who's Who for 2016

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