

# Run 19 RHIC Machine/Experiments Meeting

*December 10, 2019*

## Agenda:

- General discussion of Run 20 - W. Christie
- Collider Status/update - C. Liu
- LEReC Status/update - A. Fedotov
- STAR Status/update - J.H. Lee
- All Other Business (AOB)

## BLUEJEANS CONNECTION INFO:

To join the meeting on a computer or mobile phone: <https://bluejeans.com/273705843/1875?src=calendarLink>

Phone Dial-in +1.408.740.7256 (US (San Jose))

+1.866.226.4650 (US Toll Free)

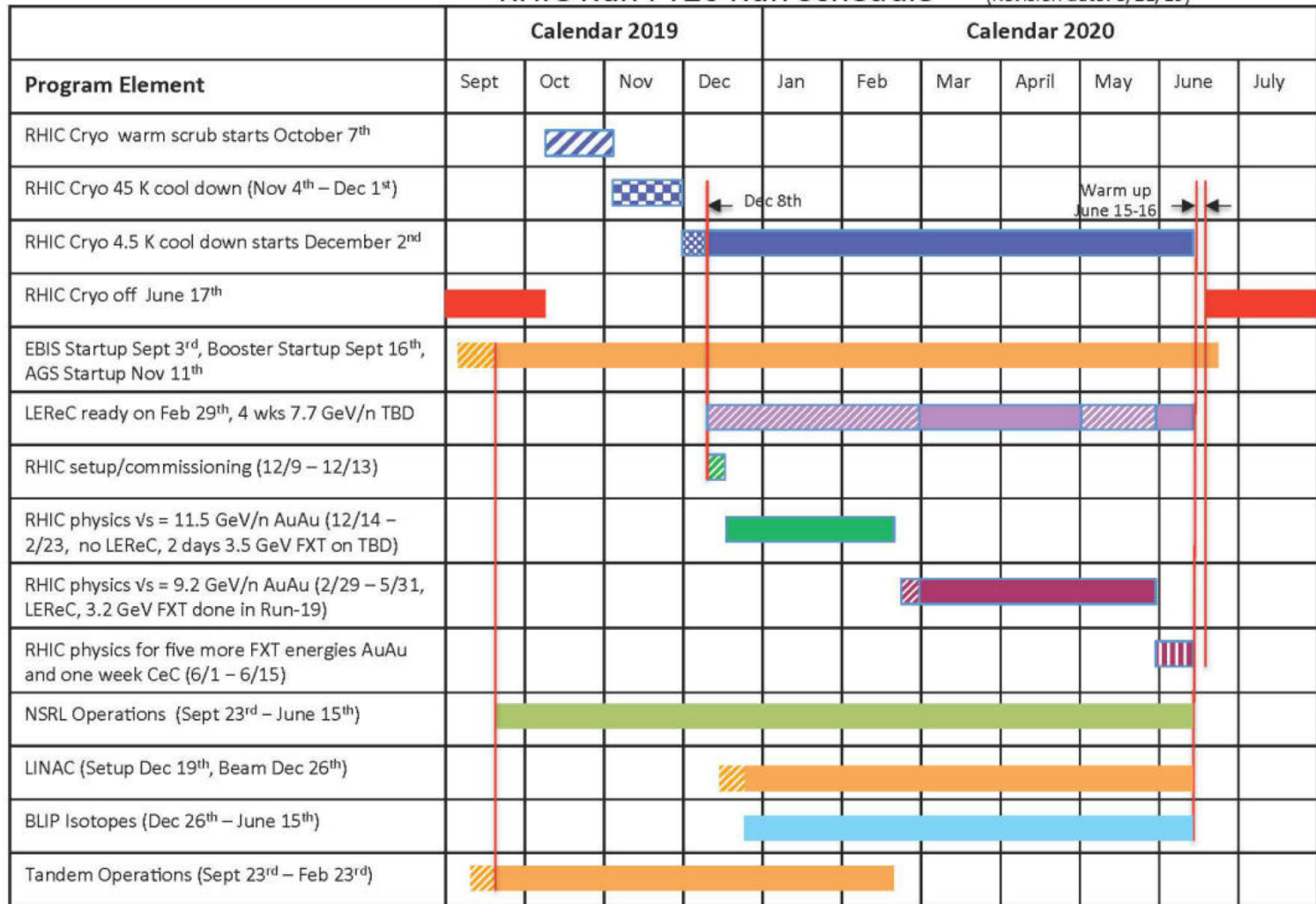
+1.408.317.9253 (US (Primary, San Jose))

Global Numbers: <http://bluejeans.com/numbers>

**Meeting ID: 273 705 843**

# RHIC Run FY20 Run Schedule

(Revision date: 8/21/19)



**N.B. This schedule assumes that we end up with a budget that allows for a 28 Cryo week run.**

The actual transition date between 11.5 and 9.2 GeV Physics running will be a matter of discussion as the run progresses.

It is likely that STAR will request to start/run the Fixed target sometime in mid to late January.

# Beam Use Request for Run20

	Beam Energy (GeV/nucleon)	$\sqrt{s_{NN}}$ (GeV)	$\mu_B$ (MeV)	Run Time	Number Events	
					requested	collected
Run20	9.8	19.6	205	4.5 weeks	400M	582M
	7.3	14.5	260	5.5 weeks	300M	324M
	5.75	11.5	315	9.5 weeks	230M	
	4.55	9.1	370	9.5 weeks	160M	
	3.85	7.7	420	12 weeks	100M	
Run20	31.2	7.7 (FXT)	420	2 days	100M	51M
	19.5	6.2 (FXT)	487	2 days	100M	
	13.5	5.2 (FXT)	541	2 days	100M	
	9.8	4.5 ( FXT)	589	2 days	100M	
	7.3	3.9 (FXT)	633	2 days	100M	53M
	5.75	3.5 (FXT)	666	2 days	100M	
	4.55	3.2 (FXT)	699	2 days	100M	201M
	3.85	3.0 (FXT)	721	2 days	100M	3.7M+300M (run18)

- Top priority for Run20 is measuring next two energies in BES-II at  $\sqrt{s_{NN}} = 11.5$  GeV and 9.2 GeV
- Finishing **fixed target** measurements at  $\sqrt{s_{NN}} = 3.5, 3.9, 4.5, 5.2, 6.2, 7.7$  GeV

## Some anticipated Issues that we'll be discussing through out RHIC Run 20

- The length of the run (24 vs 26 or 28 Cryo weeks, awaits final FY20 budget)
- Going into the run, it looks like a significant challenge, that we may not be able to overcome, to fully meet the stated STAR data set (statistics) goals.
- A key decision will be deciding when to switch from the 11.5 to the 9.2 GeV Physics running. The timescale for this decision is likely sometime in February.
- When to run the STAR Fixed target program, as well as whether to run it all in the same time period. Likely timescale for this decision is mid January or so.
- We need to accommodate collider time for the 9.2 and 7.7 LEReC commissioning, as well as the CeC program.
- What is clear now is that we have to be very careful and deliberate in scheduling and efficiently utilizing every day of RHIC Run 2020.

These are what I anticipate as being the key issues we'll be dealing with during the run. Any additional issues that people would like to add to the list?

## All Other Business (AOB)