

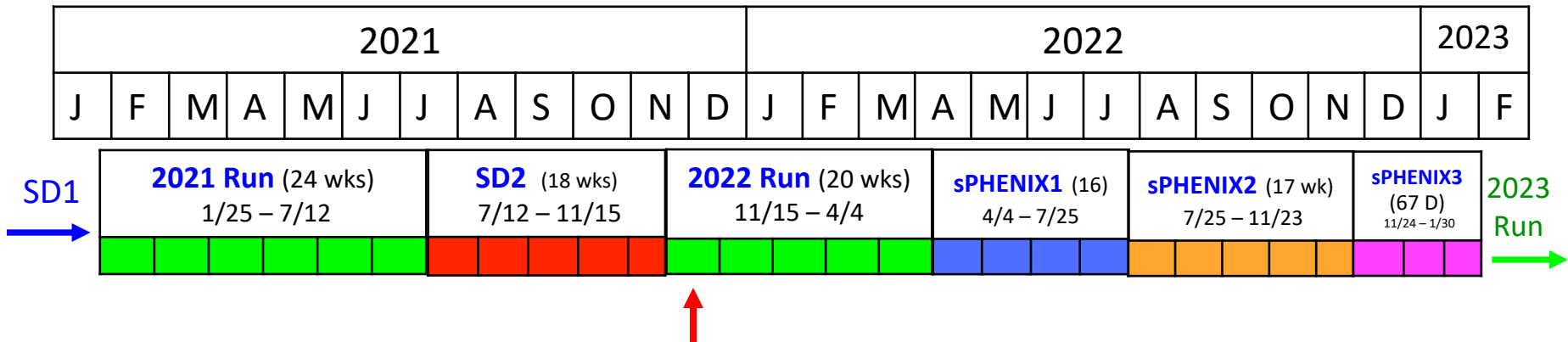
Run 22 RHIC Machine/Experiments Meeting

November 30, 2021

Agenda:

- Welcome and Overall schedule for the FY 22 RHIC run - W. Christie
- STAR status, schedule, and update - J.H. Lee
- CeC status, schedule, and update - I. Pinayev
- RHIC status, schedule, and update - V. Schoefer
- All Other Business (AOB)

Rough Look at Long Term Schedule



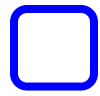
N.B. Whereas STAR was asked to submit a BUR for the 2021 run for 24 and 28 Cryo weeks, the baseline schedule above assumes 24 weeks for the 2021 run.

N.B. This Schedule was the result of meetings that were held in late summer of 2020 to discuss the longer-term schedule.

A calendar for the remainder of Calendar 2021



Today's date



Scheduled start of Helium cooldown. With schedule issue that arose three weeks ago, the cooldown started for only the Blue ring.



Yellow ring cooldown started.



First collisions for STAR.

Timeline for RHIC startup

11/30/2021

	Wed 12/1	12/2	Fri 12/3	12/4	12/5	Mon 12/6	12/7	12/8	12/9	
Owl	<u>p.s</u> work	Blu <u>inj</u> / <u>pC</u>	Blue <u>inj</u> , hysteresis, <u>pC</u>	Yellow <u>inj</u> , <u>pC</u> , first ramps	Ramps/ <u>pC</u>	Store setup				
Day	<u>p.s.</u> work	<u>p.s</u> work	<u>p.s.</u> work		<u>Rebucket</u>	Ramp up and transition to physics				
Eve	Blue <u>inj</u>	<u>p.s</u> work	<u>p.s</u> work		<u>Rebucket</u>					

Shifts	
Owl	0001-0800
Day	0800-1600
Eve	1600-2359

- CeC beam-based alignment to take place in parallel with pC setup/conditioning where possible
- Dec 6th and after days reserved for optimization and contingency:
 - pC target finding conditioning: 12 hrs
 - CeC BBA: 24 hours
 - Very like that some pC conditioning and CeC work remains by 12/6+

Discussion topic: Priorities, needs, and plans once stable collisions are available for use by STAR?

Slide courtesy of V. Schoefer

All Other Business (AOB)

- AOB

Program Advisory Committee (PAC) recommendations on the 2022 RHIC Run

2.2 Discussion and Recommendations for RHIC Run 22

The Run 22 BUR of a transversely polarized pp run at 510 GeV with the STAR Forward Upgrade represents a unique opportunity to address important issues in spin physics and will allow exploration of the regimes of low and high- x physics with unprecedented precision. New results anticipated for Run 22 with the Forward Upgrade can have important impacts on the planning for EIC, as well as on the interpretation of EIC data. *The PAC strongly endorses the STAR Run 22 BUR.*

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If Run 22 were to be reduced from 20 to 18 weeks that would result in at least a 15% reduction of the integrated luminosity and have a very detrimental effect on the prospects of achieving all the physics goals. Given that the CeC beam time would additionally reduce the STAR run by 2.6 weeks, this would have further negative effects on the physics programme. C-AD is strongly encouraged to optimize RHIC operations to fulfill the goals of both CeC and STAR.

What is shown here are the first and eighth paragraphs from the PAC report concerning the 2022 RHIC run. The other paragraphs of the section deal with physics, as opposed to operations topics.