

RHIC PAC Opening Remarks

25th year of RHIC operations

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RHIC AGS Users Meeting 2025

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Overview

- DOE Budgets FY25 and FY26
- RHIC Run Status (technical details in next talk)
- RHIC operations planning – Calendar Year 2025 (and beyond)

June 17, 2025

Our knowledge of DOE Budgets FY25 and FY26

Going blind and plan to operate the collider for **RHIC Run 25: FY25+FY26 Operation**

Based on the guidance given to BNL ALD (RHIC Ops Review 2024)
PAC Report 2024 – the guiding principle for planning Run 25.

Original RHIC Run-Plan for 2025

Aim: Complete RHIC Operations mission

Run 25 in calendar year 2025 (Operations funds: FY25+FY26)

FY25: 18 weeks of Au+Au at 200 GeV: *Assumption*

FY26: 12 weeks: (Au+Au and ???) *Assumption*

} Total of 30 weeks

Original Timeline: March 24-June 30 → [A summer break](#) → August 18 - December 22, 2025

The PAC Report:

- 1. To accumulate 7 nb^{-1} integrated Au-Au data for sPHENIX, as highest priority**
- 2. If there is time/money then (not an ordered list):**
p-p (~5 weeks); p-Au (~3-weeks); O-O data; Space Radiation studies @ STAR (fixed tgt)
- 3. Critical need for EIC related R&D (APEX 3-4 weeks)**

RHIC PAC meeting was planned June 17-18, 2025, to discuss the late-2025 operations

Run 2025: Reality

A short in the blue ring, sector warmed up, the elusive finally fixed Friday May 2nd. Now, RHIC on June ~10th

If total operation is still (18+12 = 30) weeks

Timeline: June 10 → without summer-break → January ~2, 2026

Assumes RHIC behaves well in summer (heat and humidity)

If not then, depending on the weather conditions and operations efficiency, decisions will be made daily/weekly during this time on how best to operate.

A short PAC meeting June 17th, 2025 – to be followed by a more detailed one in late July/August 2025 to plan the late-2025 RHIC operation.

RHIC operation in CY2026

CY = Calendar Year

Requires [extension of Accelerator Safety Envelop](#)

Accelerator Safety Envelop (ASE) for the RHIC complex expires **December 31, 2025**. Renewal is time & effort-consuming. Out of abundance of caution, and advise from BHSO, [I have initiated the paperwork to extend the ASE](#).

➔ *Final decision only after knowing (FY25+FY26) budget.*

If we really go beyond December 31, 2025:

Significant implications for RHIC to EIC transition. R&R (recovery and repurpose at the Collider, IR and Experiment will begin later). Will need to coordinate this with the EIC & the Lab Directorate and the DOE.

Outlook

RHIC operations mission expected to be completed in 2025 (early 2026(?))

Getting sPHENIX 7.2 nb⁻¹ Au-Au is the highest priority, followed by other operational modes desired by them and STAR, as allowed within the RHIC ops budgets.

➤ PAC meeting late July or early August(?) to discuss those other options

Followed by a party celebrating RHIC in Spring of 2026

After RHIC operations: Transition to RHIC planned, waiting to be executed

RHIC science mission ([data analyses](#)) may continue for a decade; and we intend to archive data for use for multiple decades

Transition to EIC starts immediately: [Removal](#) & [Repurposing](#) (both for accelerator complex, interaction region and experiments)

Injector complex and other existing hardware in RHIC will be maintained for the EIC