## IPAC'24 - 15th International Particle Accelerator Conference



Contribution ID: 1517 Contribution code: MOPC07 Type: Poster Presentation

# RHIC Au-Au operation at 100 GeV in Run 23

Monday, 20 May 2024 16:00 (2 hours)

The Relativistic Heavy Ion Collider (RHIC) Run 23 program consisted of collisions of 100 GeV gold beams at two collision points for the first time since 2016; the sPHENIX collaboration used the beam to commission their new detector systems while STAR took physics data. Completion of sPHENIX construction pushed the start of the run to May, forcing the collider complex to operate over the summer months and incurring lower than normal availability due to heat and power dip related problems. Issues with dynamic pressure rise during acceleration through transition resulted in a slower ramp up of intensity compared to prior years. Finally, a failure of a warm-to-cold current lead interface in the valve box for the Main Magnet power supply forced the run to end. This paper will discuss the progress made by each experiment and the failure mode, repair and mitigation efforts in preparation for Run 24.

#### **Footnotes**

### **Funding Agency**

## Paper preparation format

Word

## Region represented

North America

**Primary author:** SHREY, Travis (Brookhaven National Laboratory)

Co-authors: ZALTSMAN, Alex (Brookhaven National Laboratory); MI, Chaofeng (Brookhaven National Laboratory); LIU, Chuyu (Brookhaven National Laboratory); RAPARIA, Deepak (Brookhaven National Laboratory); SEVERINO, Freddy (Brookhaven National Laboratory); MARR, Gregory (Brookhaven National Laboratory); ROBERT-DEMOLAIZE, Guillaume (Brookhaven National Laboratory); HUANG, Haixin (Brookhaven National Laboratory); MORRIS, John (Brookhaven National Laboratory); SANDBERG, Jon (Brookhaven National Laboratory); ZENO, Keith (Brookhaven National Laboratory); MERNICK, Kevin (Brookhaven National Laboratory); DREES, Kirsten (Brookhaven National Laboratory); VALETTE, Matthieu (Brookhaven National Laboratory); MINTY, Michiko (Brookhaven National Laboratory); HULSART, Robert (Brookhaven National Laboratory); MICHNOFF, Robert

(Brookhaven National Laboratory); SCHOEFER, Vincent (Brookhaven National Laboratory); FISCHER, Wolfram (Brookhaven National Laboratory)

**Presenter:** SHREY, Travis (Brookhaven National Laboratory)

Session Classification: Monday Poster Session

Track Classification: MC1: Colliders and other Particle and Nuclear and Physics Accelerators:

MC1.A01 Hadron Colliders