

2024 4 15



RHIC Status

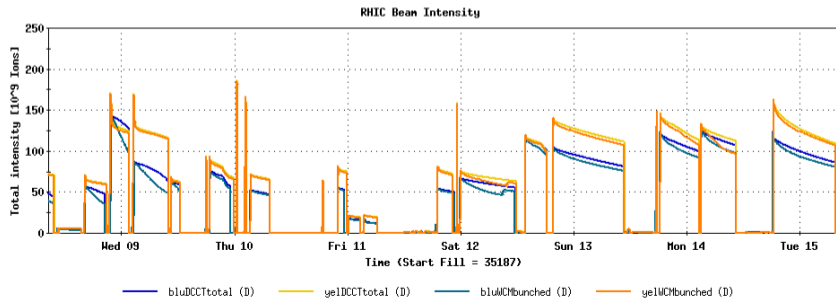
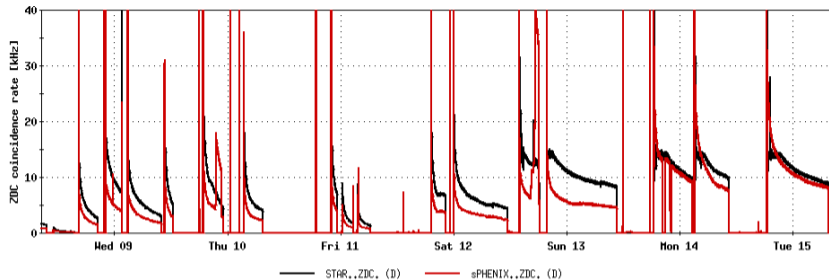
Kiel Hock

Time Meeting

October 15, 2024



Last Week at RHIC



RHIC Status

- 111x111 physics running since 10/7
- STAR at 945 M minbias events. Goal is 1-2 B events.
- Various bunch configurations for sPHENIX detector commissioning (1x1, 6x6, 12x12, 56x56, 111x111)
- Vertical and longitudinal cooling enabled in blue and yellow.
- MVTX studies with single bunches in blue and/or yellow taking place post absorber install.
 - ▶ Reported MVTX background Wednesday. Decided to go ahead with absorber install Thursday.
 - ▶ Single beam studies in yellow began Friday.
 - ▶ Showed sensitivity to beam's momentum distribution and local orbit steering (via crossing angle).
 - ▶ Optimal configuration in yellow is $dR=-0.5$ mm, -8 mm at yo8-dh14, and a 1 mrad crossing angle.
 - ▶ Single beam study in blue yesterday showed the optimal configuration for yellow is also supported by blue.
 - ▶ Will start increasing the number of bunches to determine how it scales with bunch number.
- G9-blw-ps was fixed and handed back with a reduced maximum current, Thursday.
- Blue injection efficiency lower than yellow, being investigated.