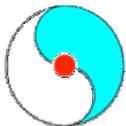




# Run-6 Status

Abhay Deshpande  
Stony Brook & RBRC

Time and Scheduling Meetings  
March 21, 2006



# A quick reminder

## Physics Goals for Run-6:

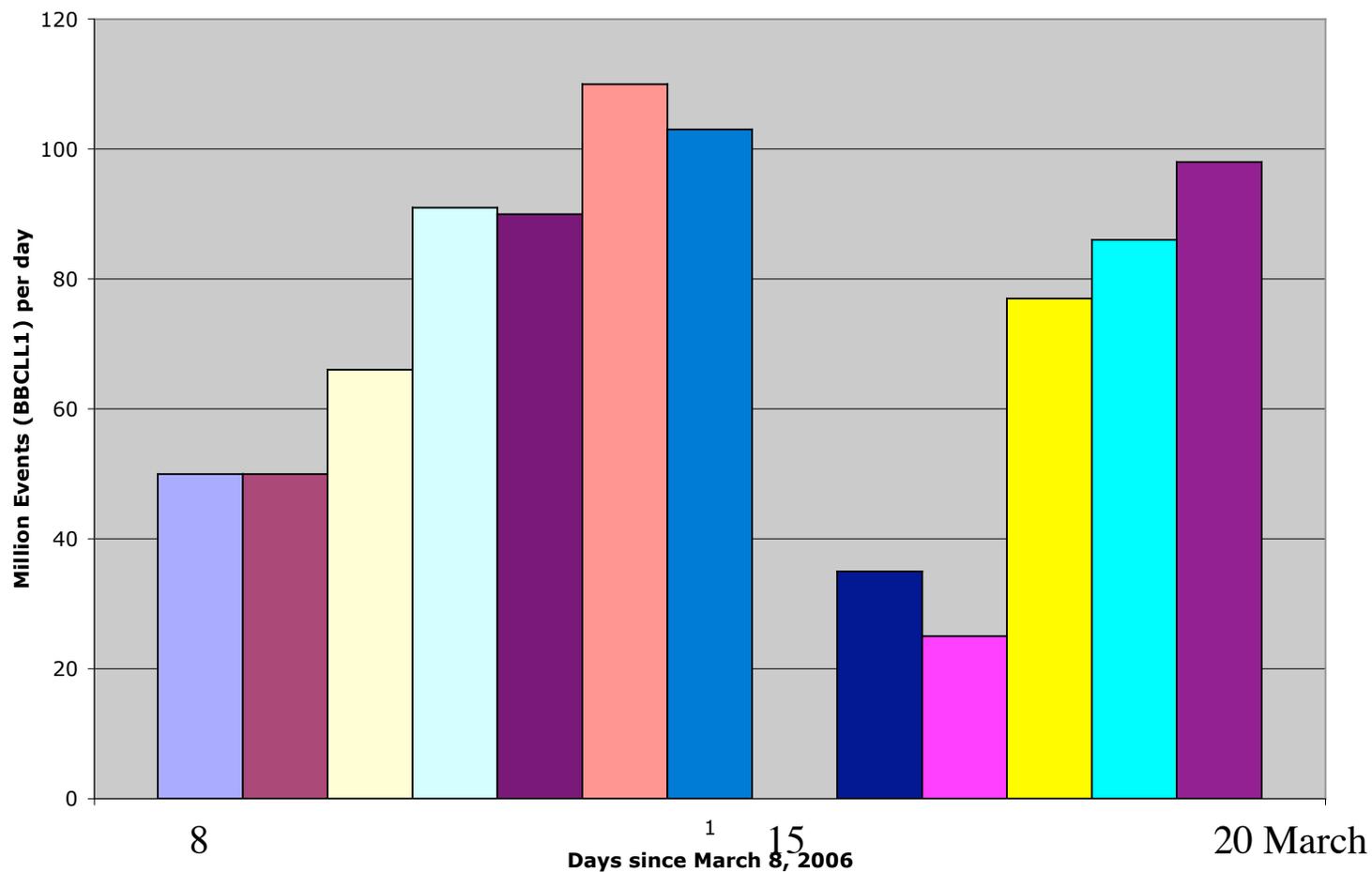
- 200 GeV CM radially polarized pp collisions with **50-60% beam polarization**, 4 weeks of operation or  $4-5 \text{ pb}^{-1}$ , which ever comes first  
 $\Rightarrow \text{FOM} = P^2L = 1.21 \text{ pb}^{-1}$
- 200 GeV CM Longitudinally Polarized pp collisions with **60% beam polarization**, 6-7 weeks of operation, **4 times** better FOM for Run-5  
 $\Rightarrow \text{FOM} = P^4L = 0.58 \Rightarrow L_{\min} = 4.5 \text{ pb}^{-1}$
- 62.4 GeV CM transversely polarized protons with **60% polarization**, 2 weeks or  $0.6 \text{ pb}^{-1}$
- 22 GeV CM proton-proton collisions  $0.4 \text{ nb}^{-1}$  or 3 days (max)
- 500 GeV CM proton-proton collisions (transverse and longitudinal) for machine development and trigger & background studies in the experiment

# Run-6 Operation

- PHENIX has followed RHIC very closely in operations
- Since then PHENIX has been operating in data taking mode since March 8th, 2006
  - **Triggers have been set**
  - **Regular calibrations, zero field runs for alignment**
  - **Doing online and (fraction of data) being analyzed by offline**
- Collider Performance is Encouraging:
  - We see good average polarization in RHIC,  $\langle 50\% \rangle$  for data taken so far, compared to  $\langle 40\% \rangle$  last week
  - Luminosity also seems to grow fill by fill
  - **Both advances are extremely essential for PHENIX program, we are far from being DAQ limited**
- Based on the collected data set we expect to go LONGITUDINAL in PHENIX IR in 4 weeks: \*around\* April 8<sup>th</sup>, 2006

# Minimum Bias Events Collected

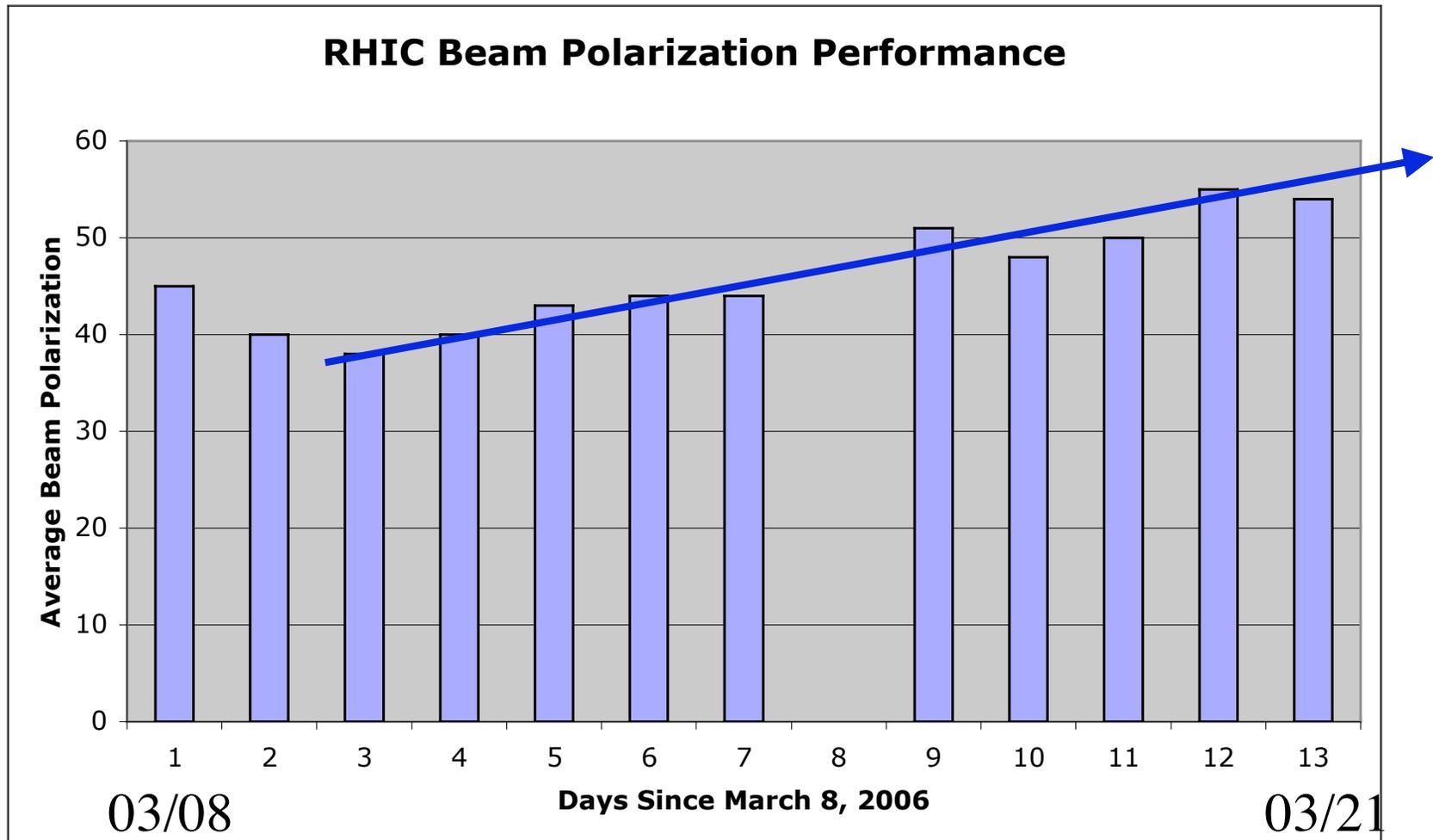
Minimum Bias Events



Total: 875M  
BBLL1  
triggers  
recorded



# Beam Polarization While PHENIX On



# Run/Schedule Issues

- Access Requests: 4 hrs at least on March 29, 2006
  - Xenon gas in TEC needs to be actively regulated
    - May need more 15 min access after that during the week
  - MPC electronic readout cards would be ready and would be installed
    - Would take ~1-2 hrs only, but benefit a lot from the transverse data set until we go to longitudinal
    - If they are ready earlier than 29, we would request short accesses behind other problems
- After that we do not need long access until mid/late April
- Firm date for transverse to longitudinal collisions would be known only later during next week