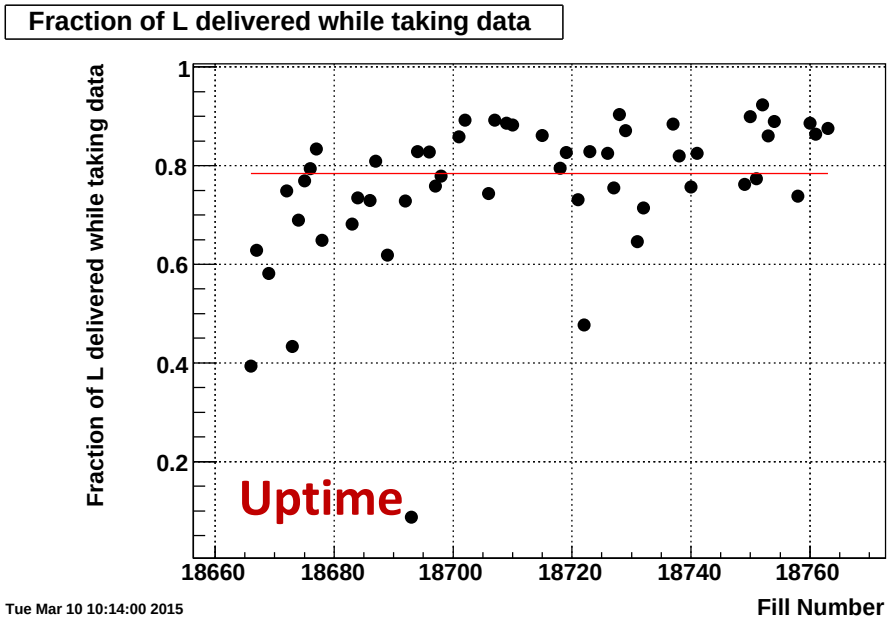
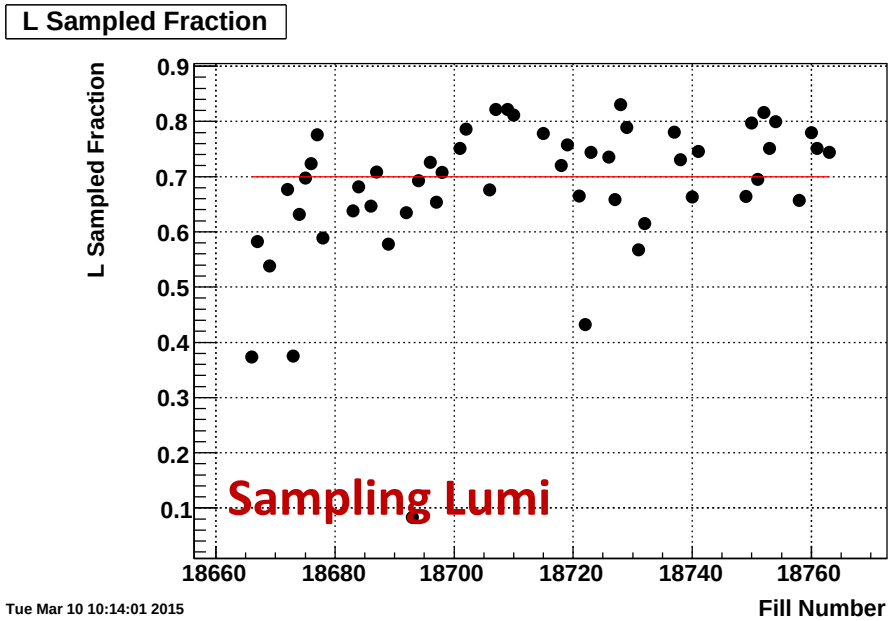
STAR Status Report

Time Meeting

March 10, 2015

Salvatore Fazio



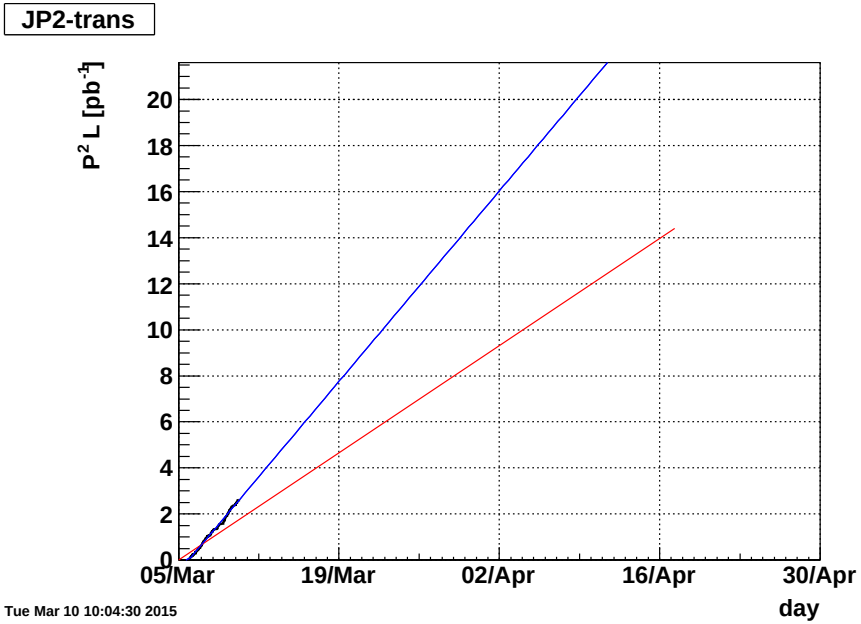


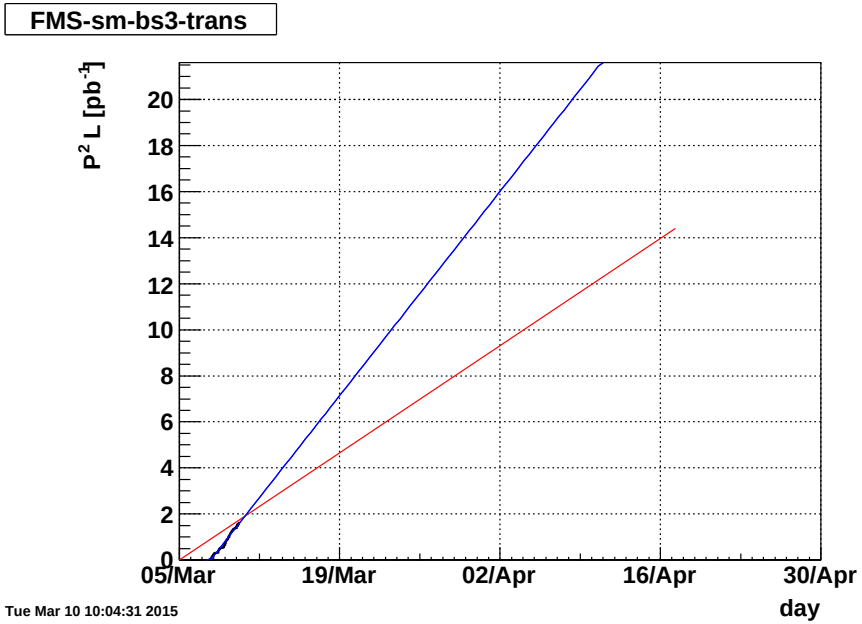
- **Switched over to transverse polarization as of last Thursday**

- **STAR had a very smooth running since the switch over**

Current Projections on reaching Data Set Goals

Transverse Spin program





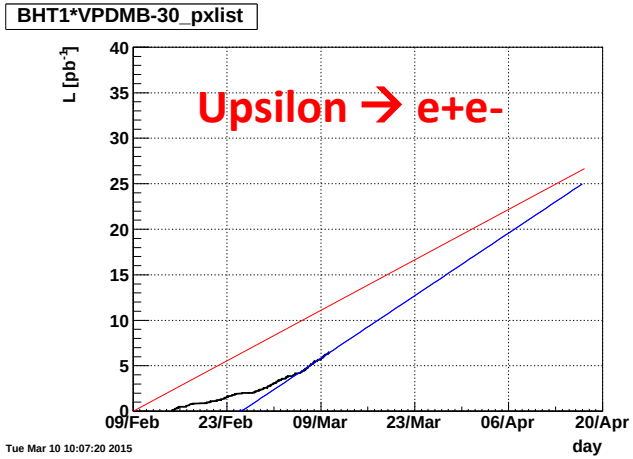
- **Transverse goals:** L = 40 pb^{-1} (60% polarization) -> **FOM: P^2L=14.4**, Eventually get back to longitudinal later on

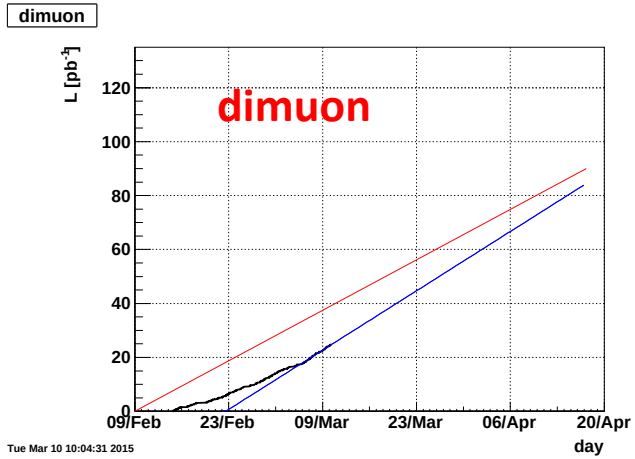
- Measure Collins asymmetries at mid-rapidity: Forward TSSAs of π^0, direct γ using new preshower detector

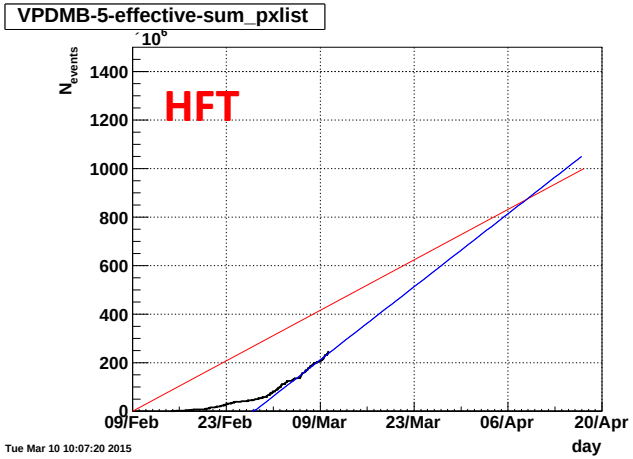
- The Forward Meson preShower (FMS) has been included in the run

Current Projections on reaching Data Set Goals

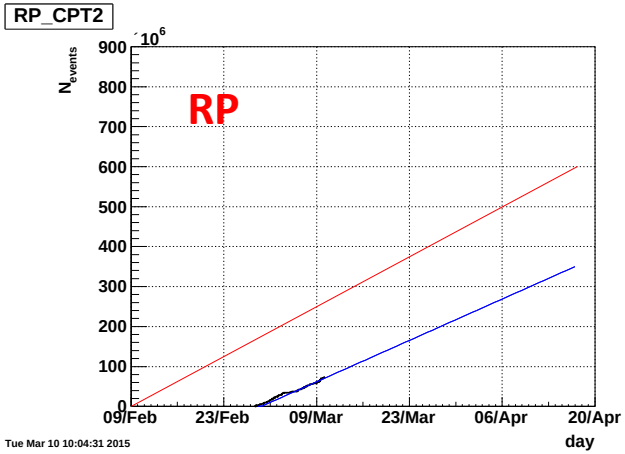
Unpolarized physics programs







- Heavy Flavor
  - Charm Using Heavy Flavor Tracker
  - Beauty using b→Upsilon →di-leptons
  - **New projected trend closer to our goals**



- Roman Pots (pp2pp)
  - Glueball search (Central production)
  - Elastic scattering
  - Diffraction

Summary

- STAR is up and Running smoothly
- All programs Unpol.+Trans. SPIN+ PP are taking data
- FMS is now included in the run
- We switched over to transverse run and we are performing very well versus our transverse physics goals. We plan eventually to come back to longitudinal after the transverse goals are reached
- New proj. trends for unpolarized program get closer to our goals too