

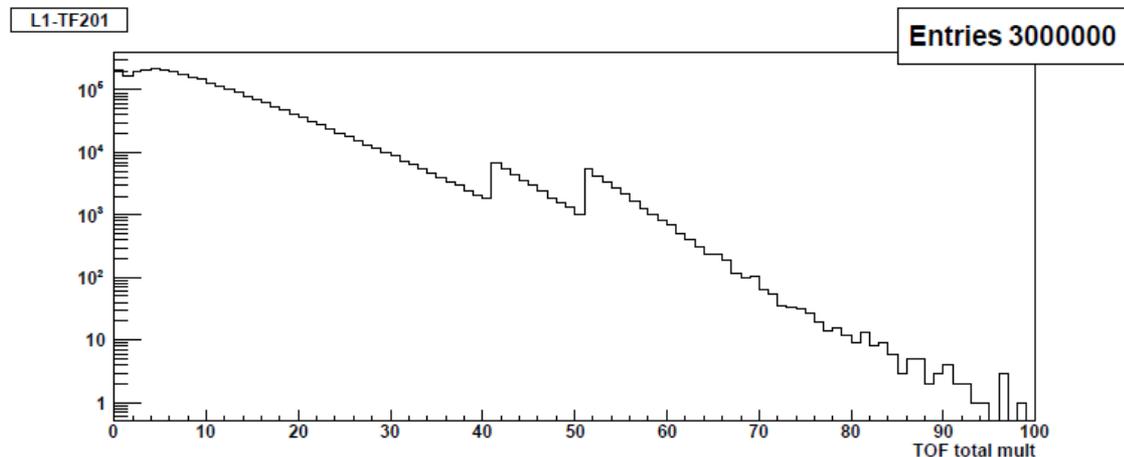
STAR Input for RHIC Coordination Mtg.

February 28, 2012

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Outline

- We'd like to get a short low Luminosity Fill for TPC Calibration before the end of the 200 GeV pp running.
- We'd like to change to a new set of four Spin patterns, and run them exclusively from now to the end of the 200 GeV pp
- We should plan for the end of store test of changing the angle of the beams through the IR. We can turn around the data in about 12 hours.



Parameters for Low Luminosity Store Request

Collision rate of ~10kHz max as measured by the BBC coincidence RICH scaler,
or 4kHz max VPD coincidence rate, less is better.

The collider really needs to run as few bunches as possible, with very little beam in each bunch.

Detector requirements: TPX, TOF, BEMC (other calorimetry detectors are welcome, but not required and should not hold up running).

Runs:

a) physics w/ lasers -> 5k laser events (With turn on of TPC, Config. of Trigger, etc. takes ~ 20 minutes).

b) physics no lasers -> 2M MB VPDMB triggered events taken allowing for a large spread in z of vertices 2M events (~50 minutes at 700Hz). TOF multiplicity trigger may be employed to keep rate around 700 Hz.

c) physic w/ lasers -> 5k laser events (takes about 15 minutes)

d) keep collect data as in b) f beam not dumped immediately after a),b),c) are done.

Request is thus to hold this low luminosity store for about 1.5 hours.

STAR requests that we run four new Spin patterns for the remainder of the 200 GeV pp run

Request is to add 4 more spin patterns so that:
Blue would have $++---++---++--$ etc. or offset by 2 and
Yellow would have $+--+---+--+---+-$ etc. or offset by 4.

This is just the reverse of the 4 spin patterns used in run9.

These 4 new spin patterns should be run for the rest of the 200 GeV pp fills.

For the 500 GeV pp run we request all 8 patterns be cycled through.

