

Statistical Distribution of Front End Transmission

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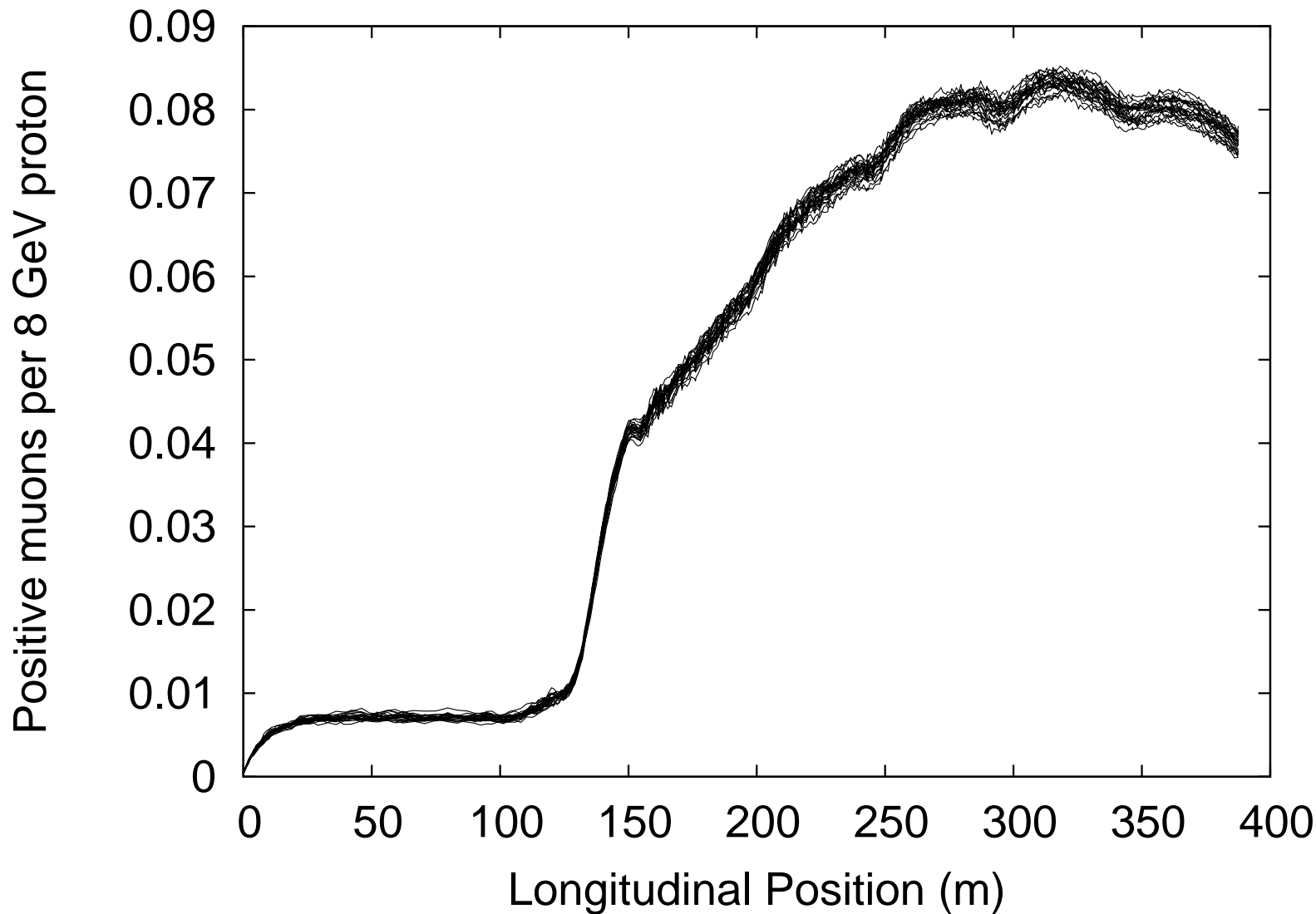
Brookhaven National Laboratory

Advanced Accelerator Group Meeting

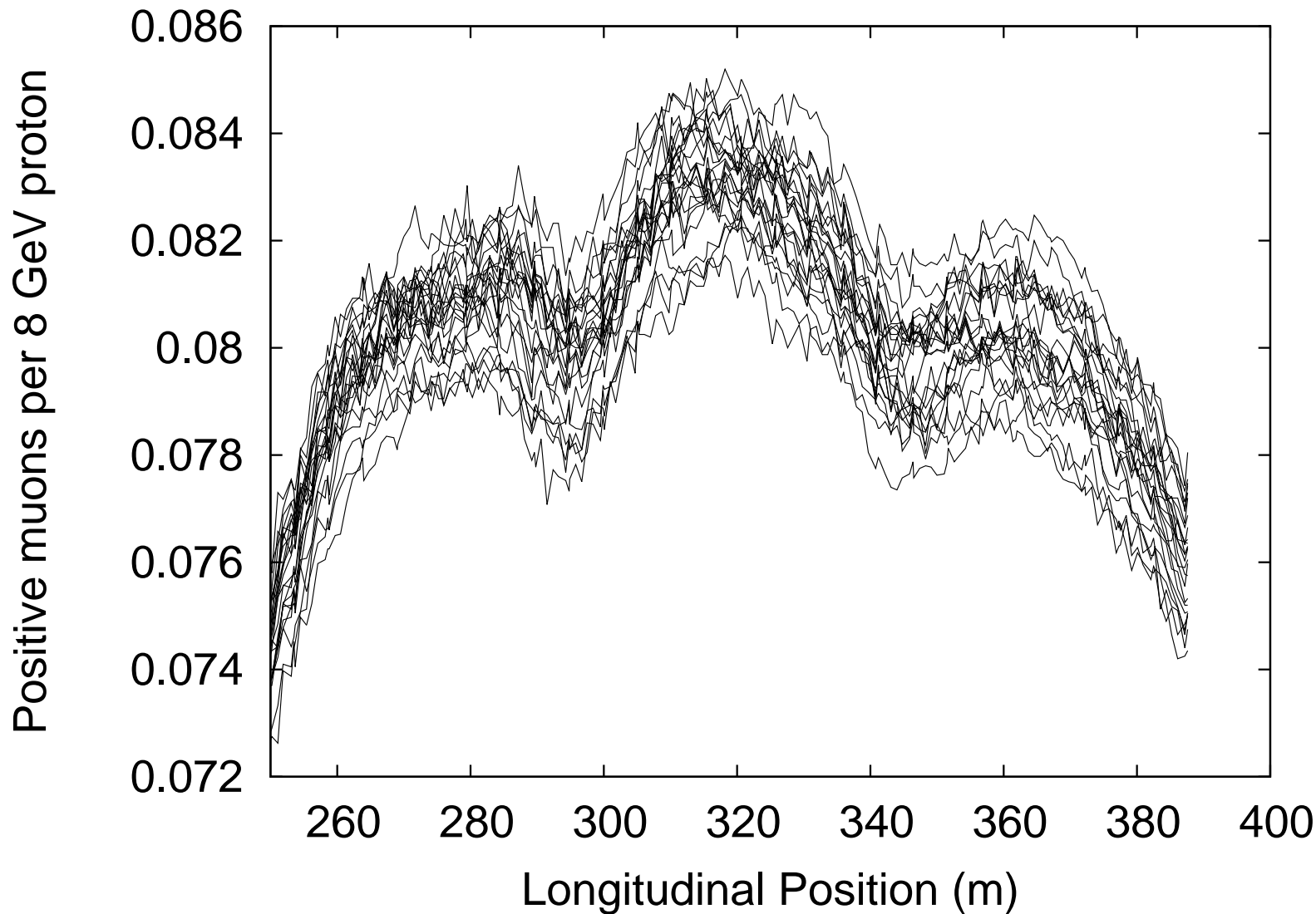
March 21, 2013

- Chris Rogers' front end deck
- Positives from 4×10^5 8 GeV protons
 - 84532 π 's, μ 's, and K's
- Vary the random seed
- Runs with parallel driver to serial ICOOL on NERSC
- Plot transmission into IDS-NF acceptance

Muons in IDS-NF Acceptance



Muons in IDS-NF Acceptance



- Roughly a 5% uncertainty
- Still not truly random: seed to MARS may be weighting results
- Really need more particles from MARS
- Bumps in transmission are real
 - Could be a result of the MARS seed choice, but unlikely
 - Indicates need for re-matching
- Could we do fewer MARS particles and average results from different ICOOL seeds?
 - Need to do high-statistics MARS runs to test