

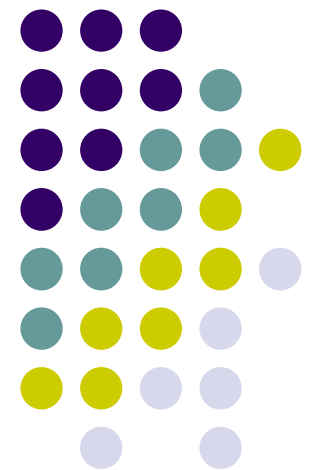
# Benchmarking ALICE Applications

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HEPIX Meeting

08/05/2008

P.Hristov

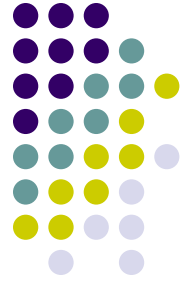


# ALICE Benchmarking Tests



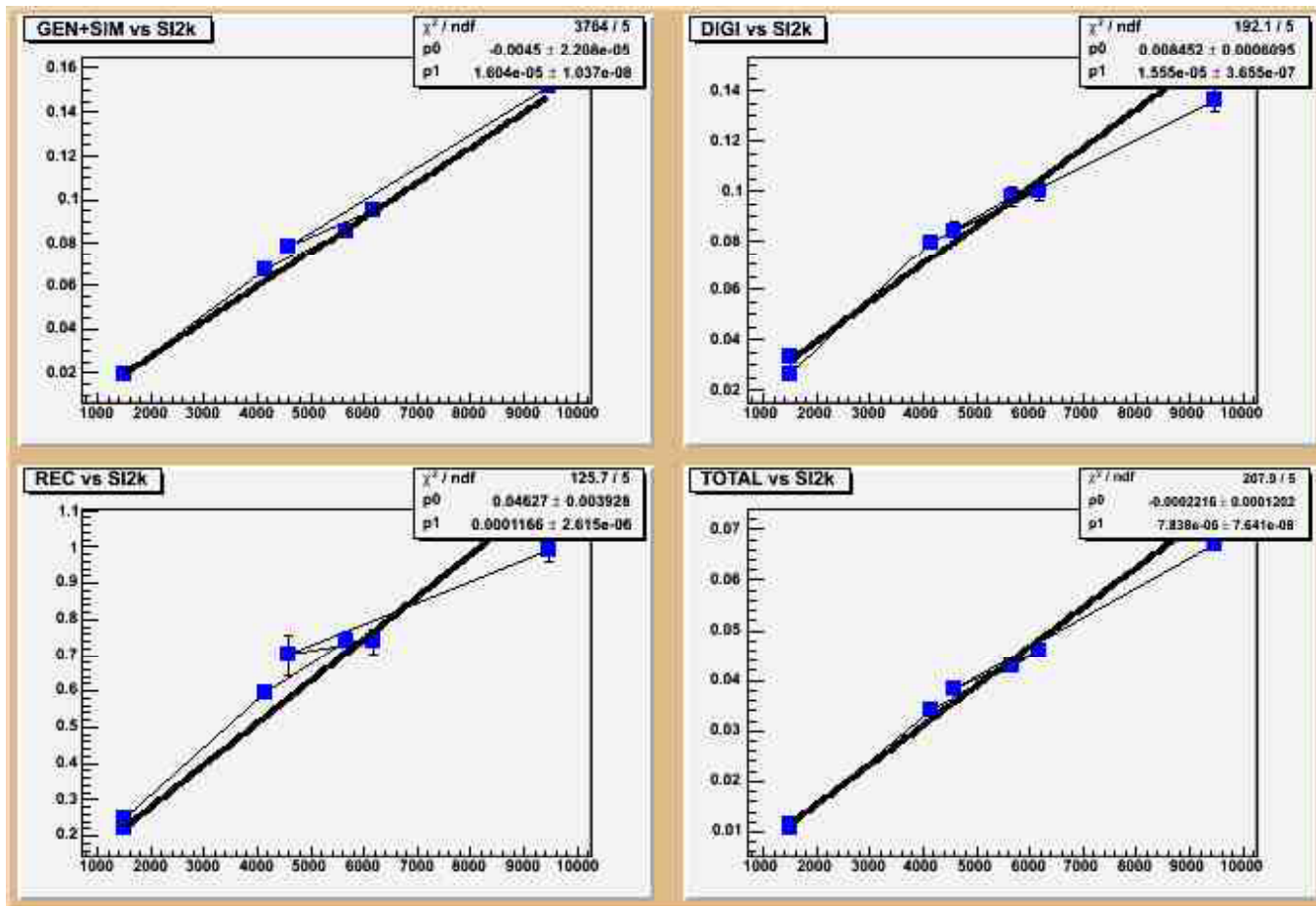
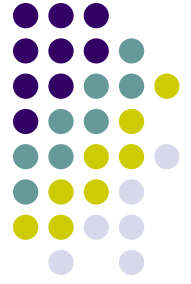
- Software versions
  - Root v5-18-02b
  - Geant3 v1-9
  - AliRoot v4-11-Release
- 20 proton-proton events at 14TeV
  - Generation: Pythia6 min. bias
  - Transport
  - Digitization
  - Reconstruction from MC digits
  - Reconstruction from simulated RAW
- Platforms used: SLC4 64 bit
- 1 Pb-Pb event
  - Generation: Hijing per2 (impact parameter 8.6-11.2 fm)
  - Transport
  - Digitization
  - Reconstruction from MC digits
  - Reconstruction from simulated RAW

# Test strategy

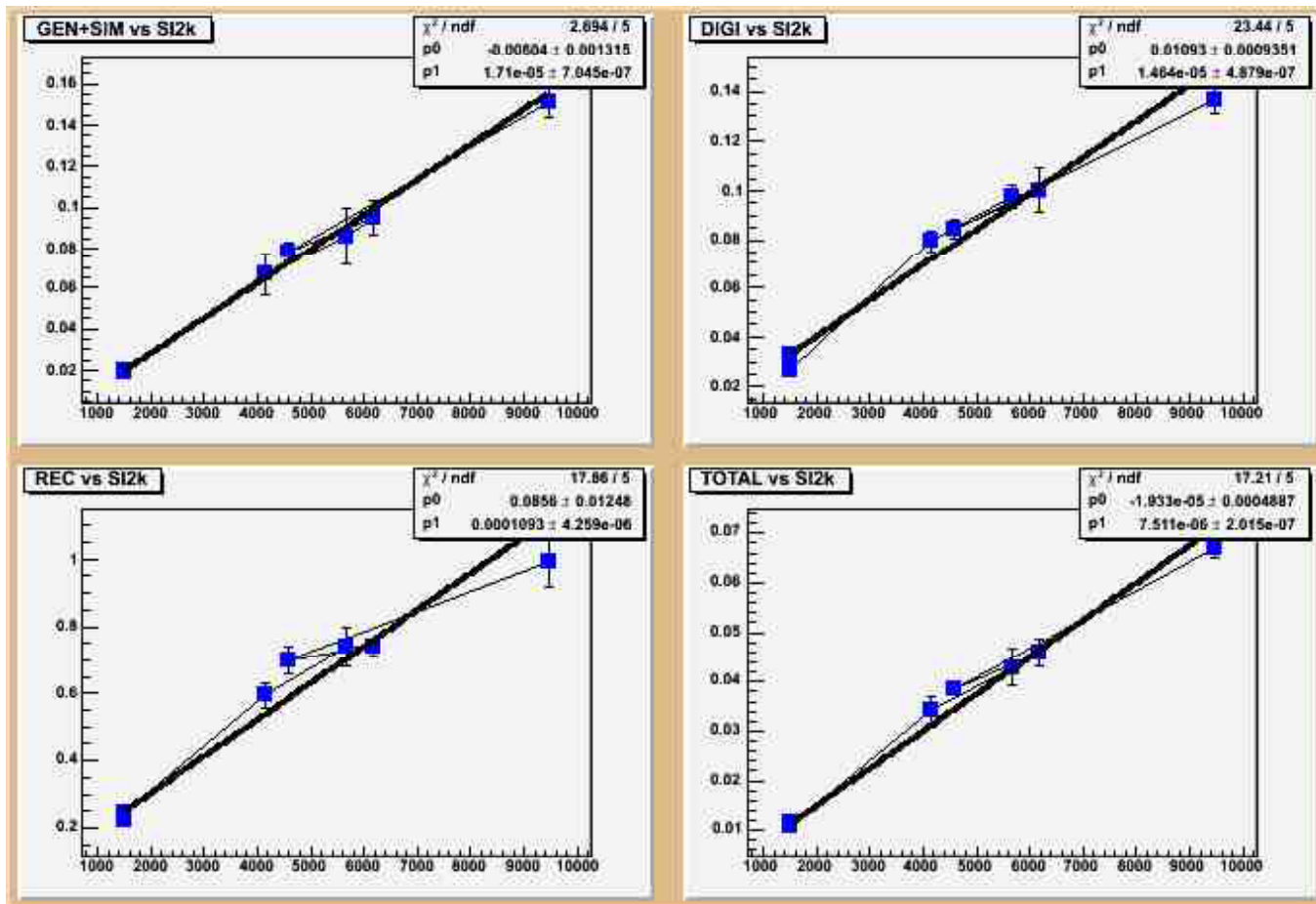
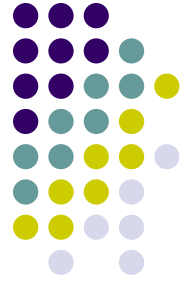


- Run one job per core all with the same seed (the jobs produce identical output)
  - Estimate the CPU mean and variance
  - Use the mean number of events per second and the recalculated variance as input for the fit
- Run one job per core all with different seeds
  - Estimate the CPU mean and variance
  - Use the (phase space dependent) variance as alternative for the error estimate

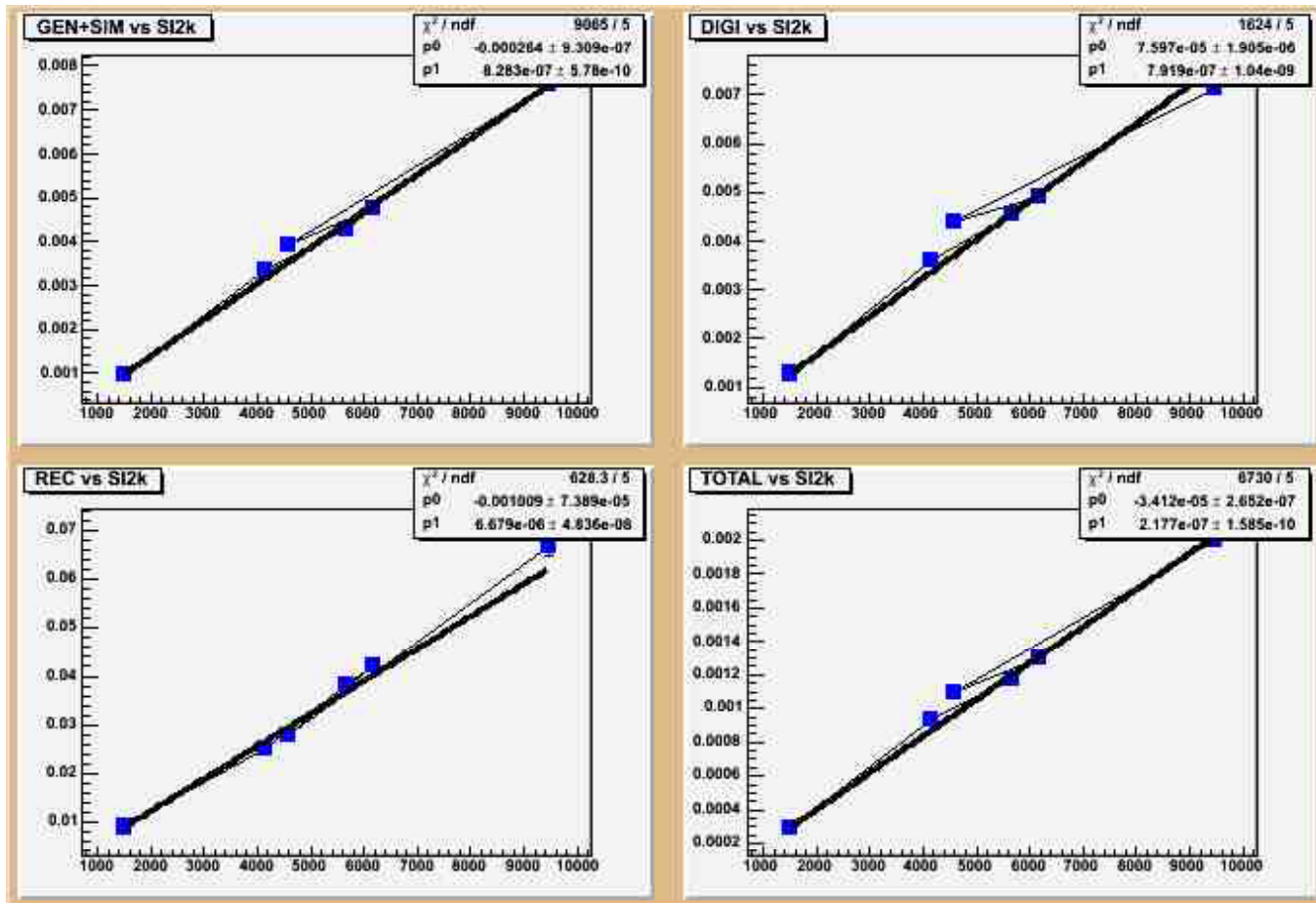
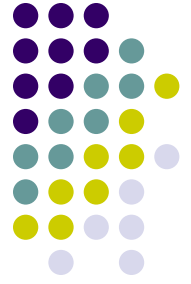
# Preliminary Results: pp vs SI2k



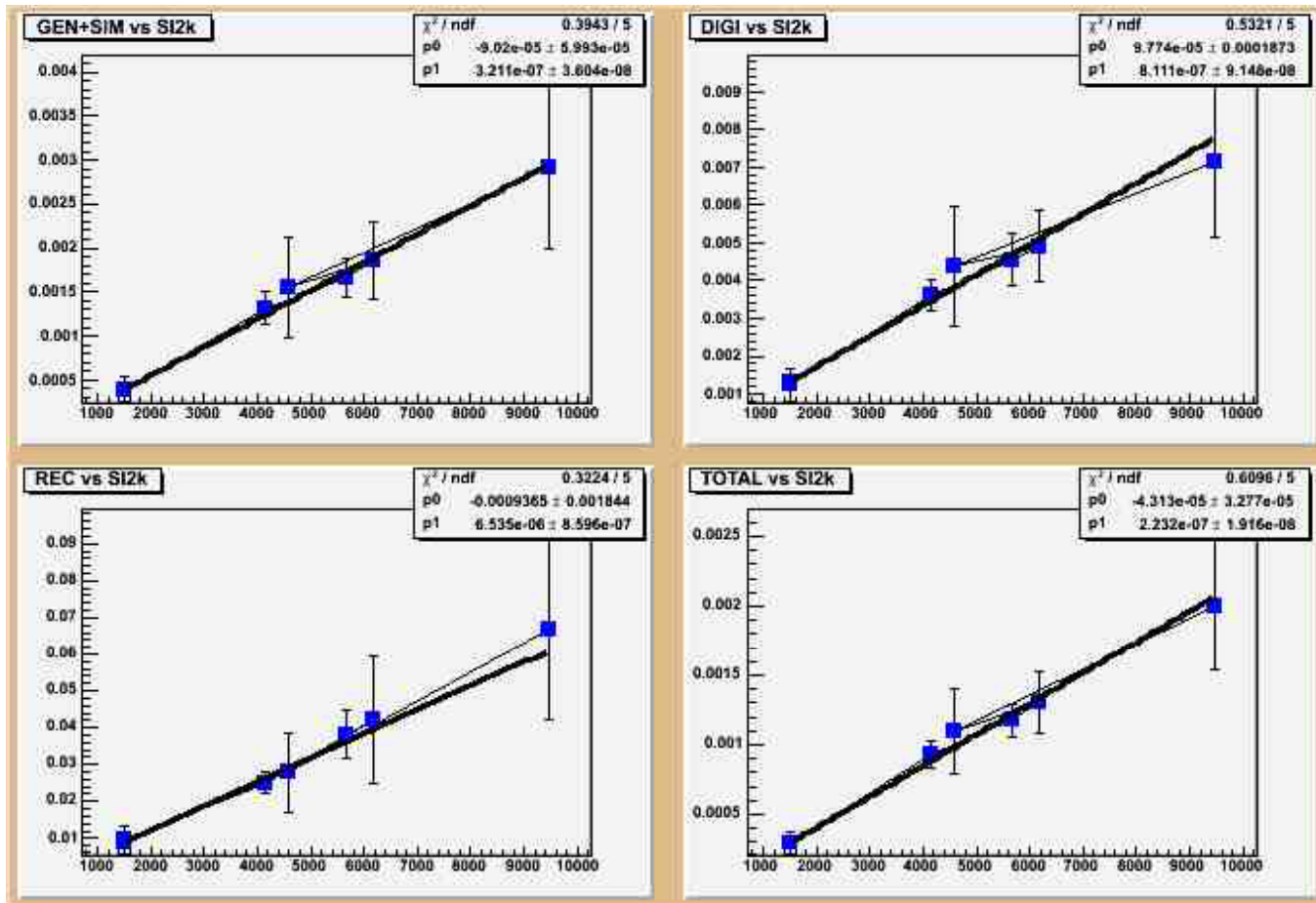
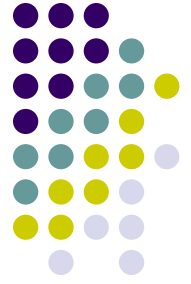
# Preliminary Results: pp vs SI2k



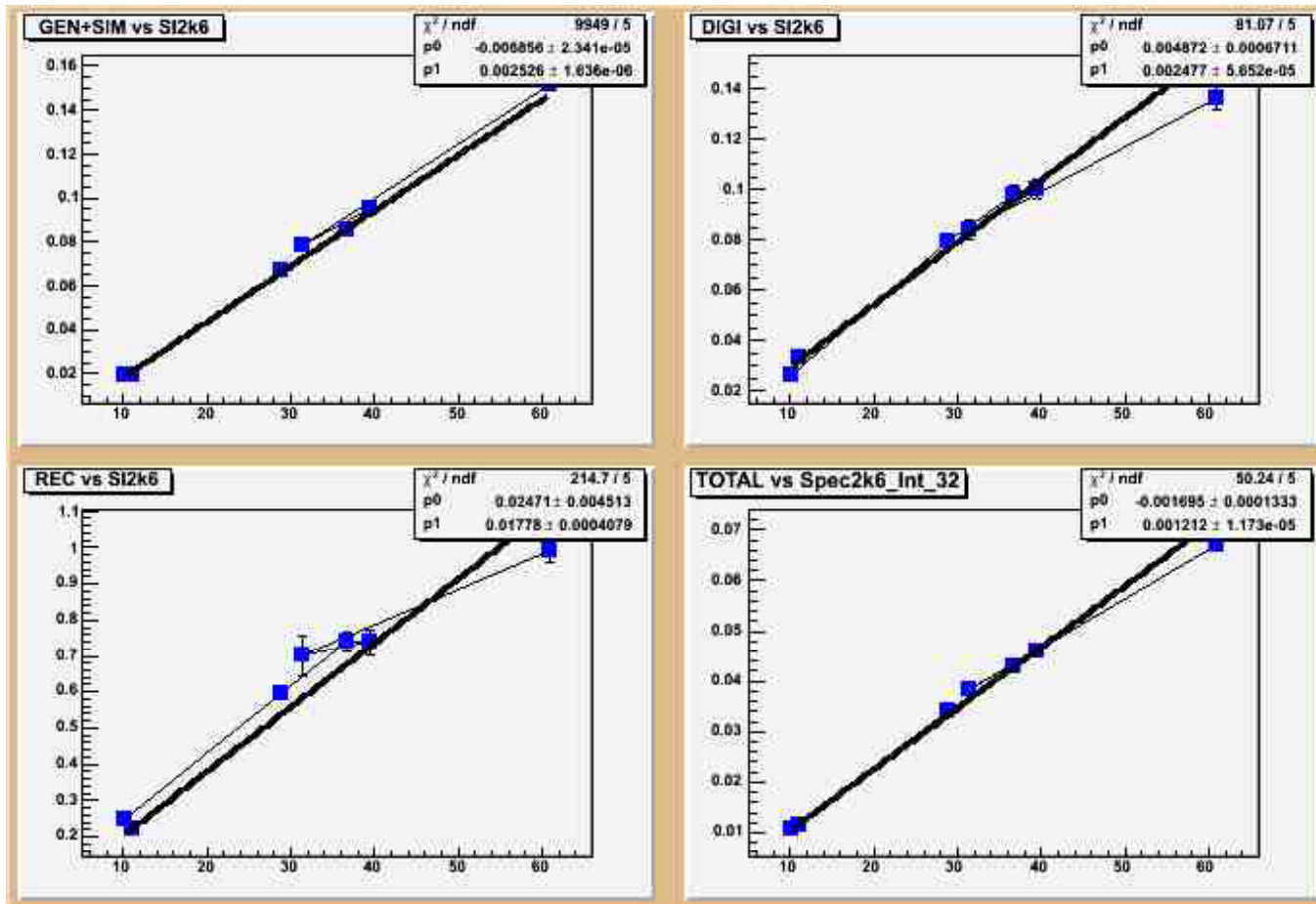
# Preliminary Results: PbPb vs SI2k



# Preliminary results: PbPb vs SI2k

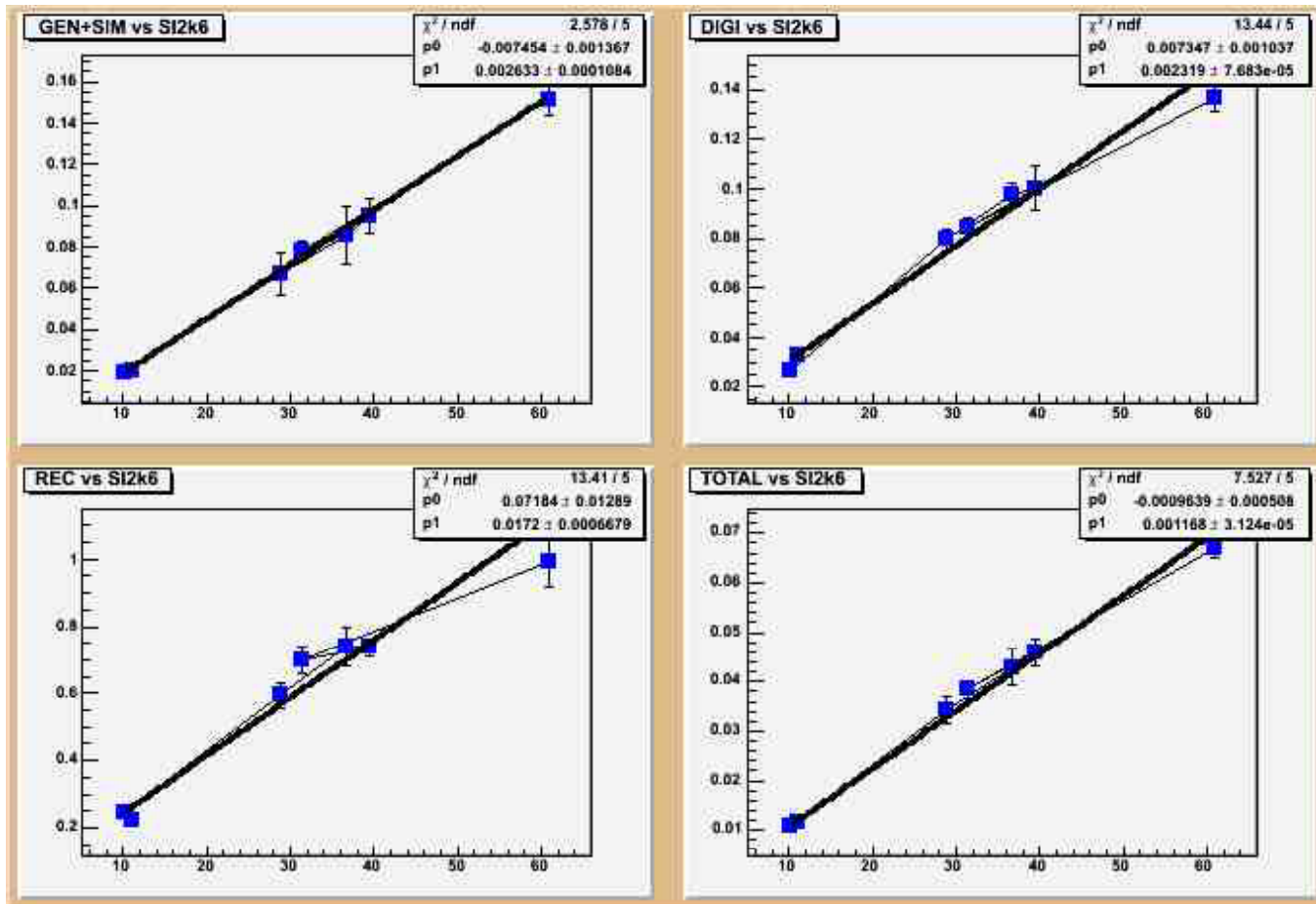
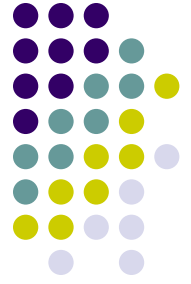


# Preliminary results: pp vs SI2k6

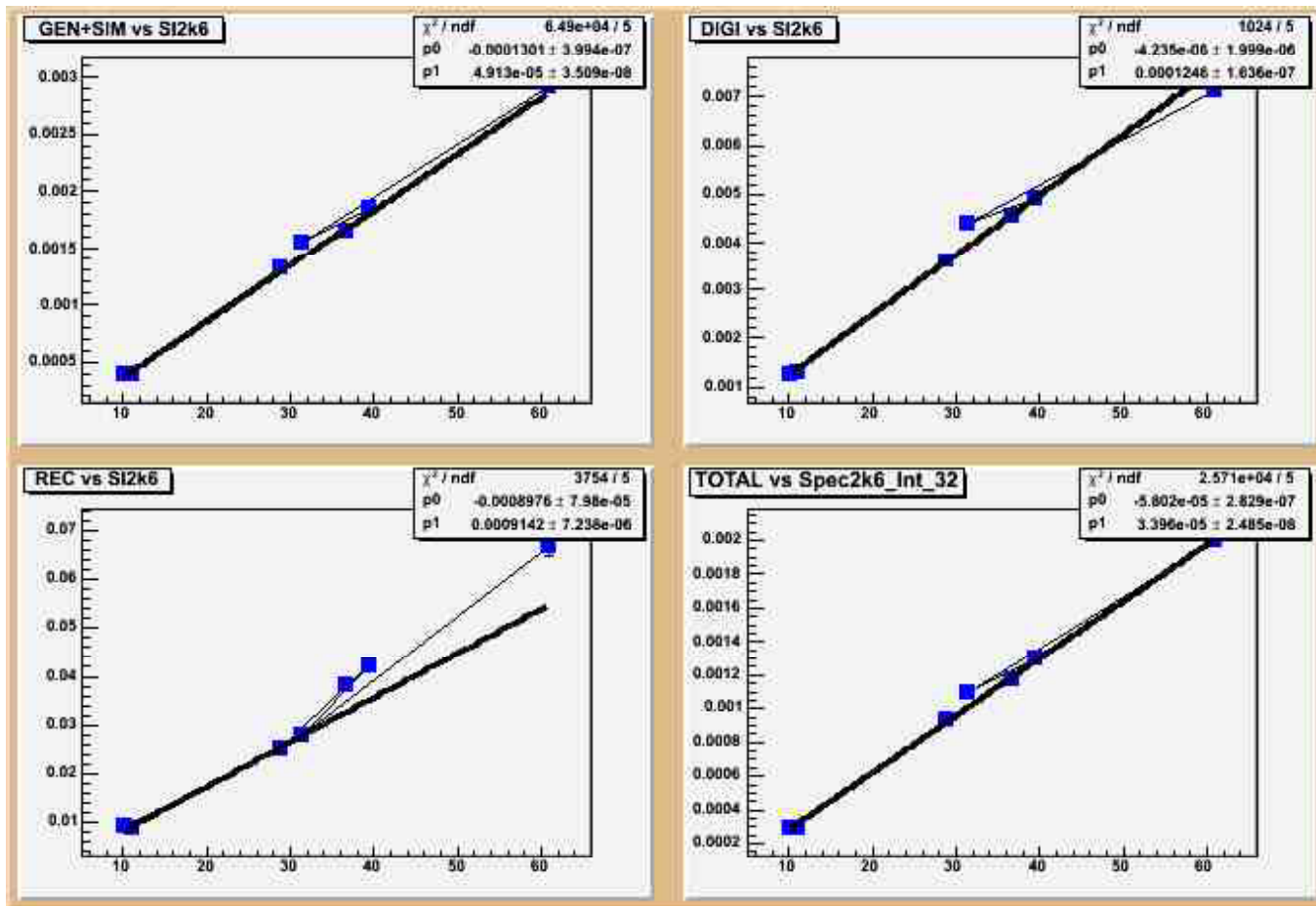




# Preliminary Results: pp vs SI2k6



# Preliminary Results: PbPb vs SI2k6



# Preliminary Results: PbPb vs SI2k6

