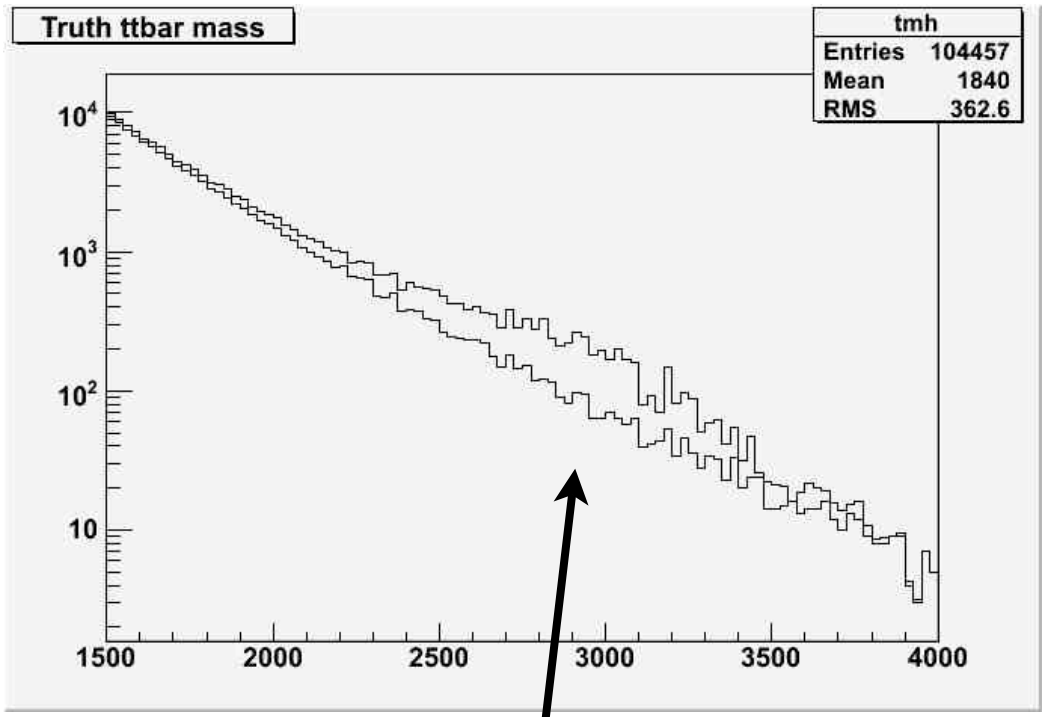
High pT Top

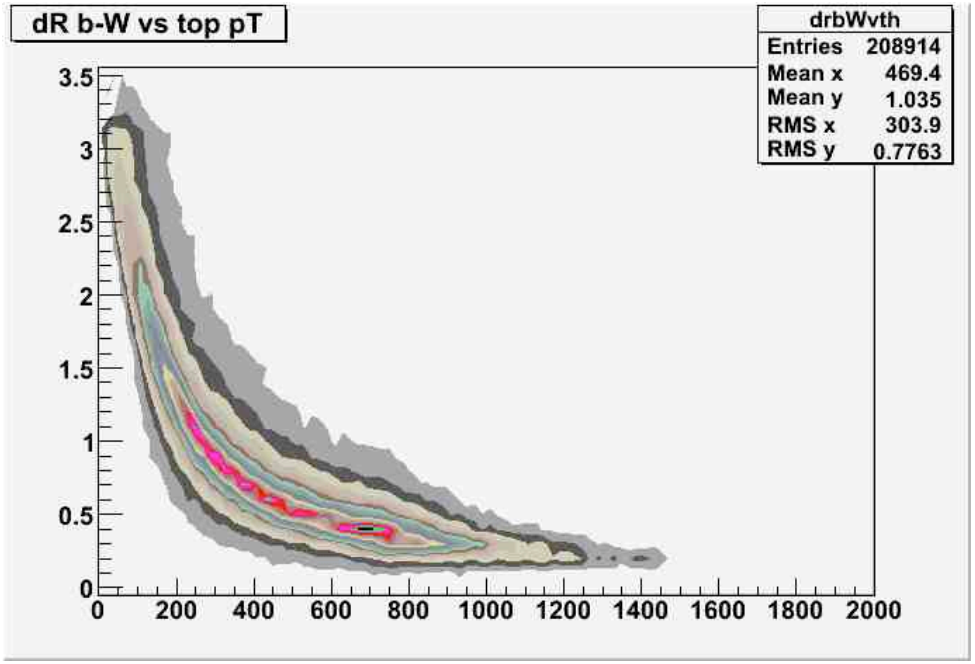
- Initial study with PGS
  - Produced 120k tt events with pythia (semileptonic)
    - m > 1.5 TeV, ~35 fb^{-1}
  - Reweighted qq->tt events with ratio of signal/qq background calculated by Gregory
  - Signal is a 3 TeV RS gluon excitation (a few points in parameter space)

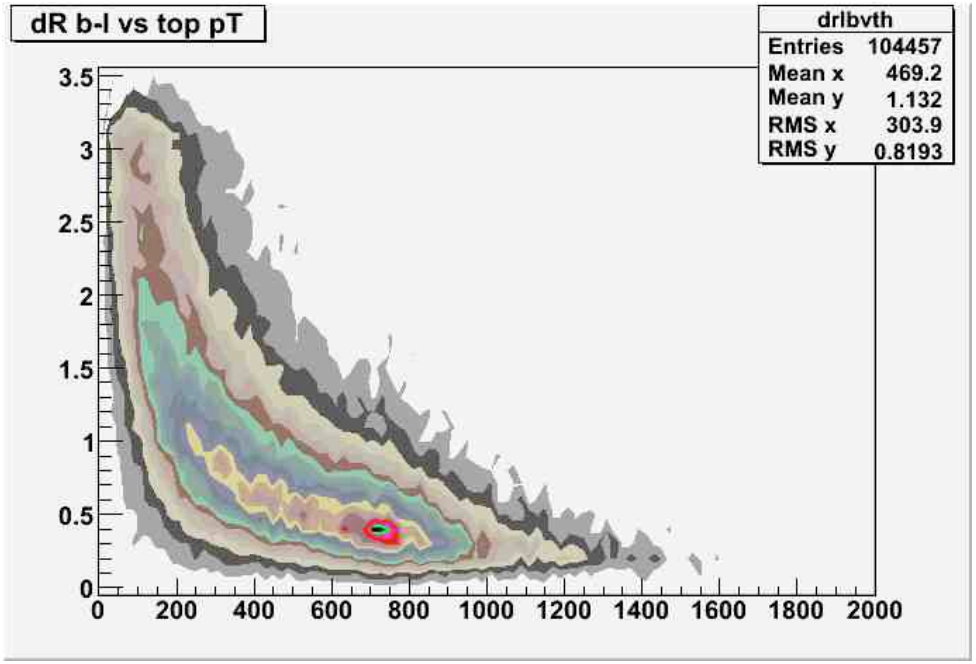


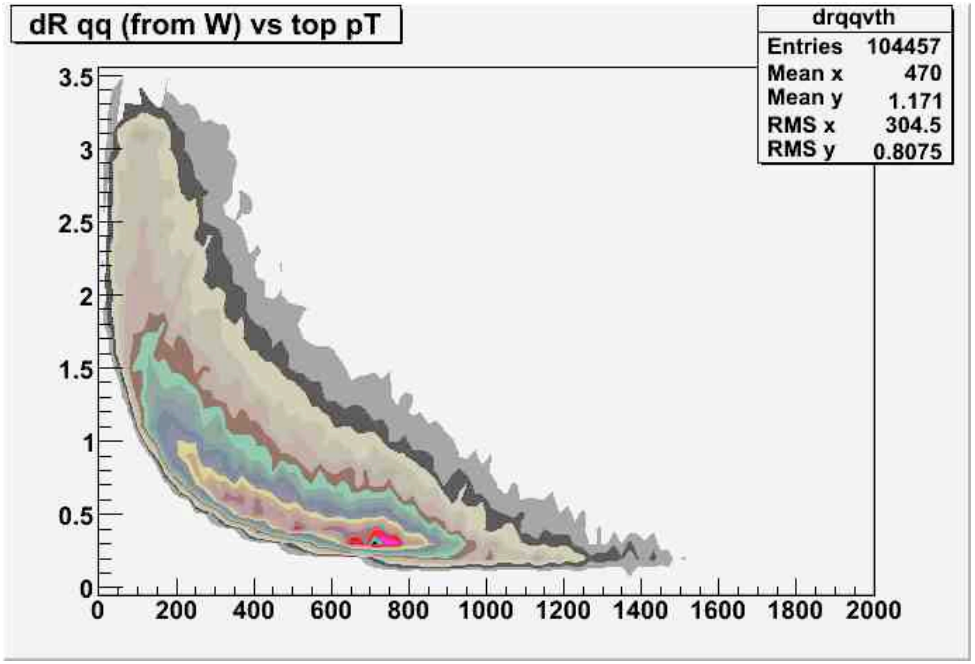
Worst case:
~800 GeV wide

Proximity of Decay Products

- All MC truth
  - Rarely less than 0.2 -> resolvable in LHC calorimeters
  - CMS HCAL 0.075x0.075
  - ATLAS HCAL 0.1x0.1

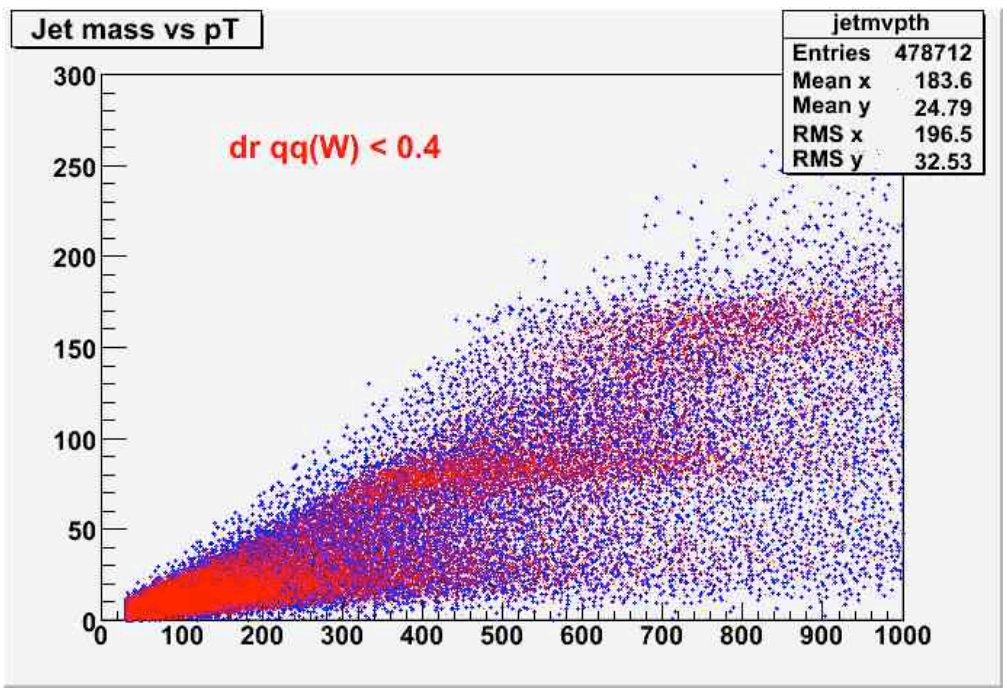


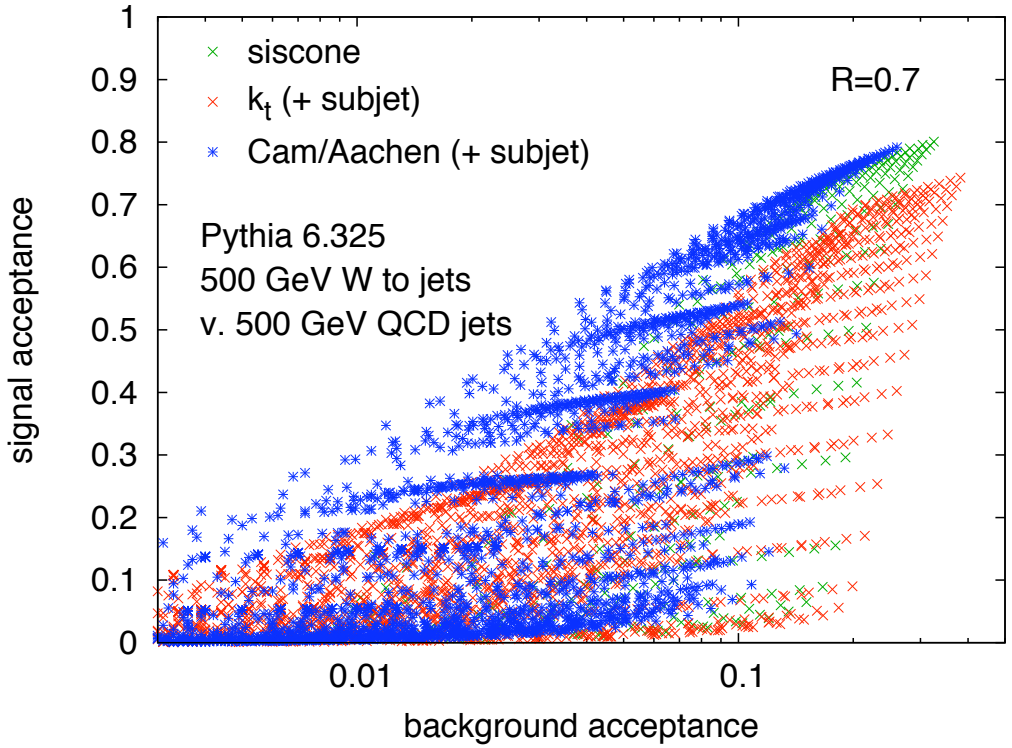




Monojet Issues

- Subjets resolvable in principle
  - kT-like algorithms ("ysplitter"), etc. (also see session 1 tools: siscone, Cambridge-Aachen algo
  - jet mass
  - tracking info





Full Simulation Studies

- PGS is limited, many possibilities using tracks, kT, etc.
- Full simulation needed
  - CMS: 2 TeV & 5 TeV events available
    - Landsberg & Ribeiro
  - ATLAS: 0.7, 1, 1.5, 2 TeV events available
    - Brooijmans & Vos (?)
- Timescales should be ok for inclusion in report

Top Polarization

- Useful to distinguish SUSY vs UED vs ....
- Studies underway
  - CMS (Landsberg, Singh)
  - ATLAS (Ros, Vos)