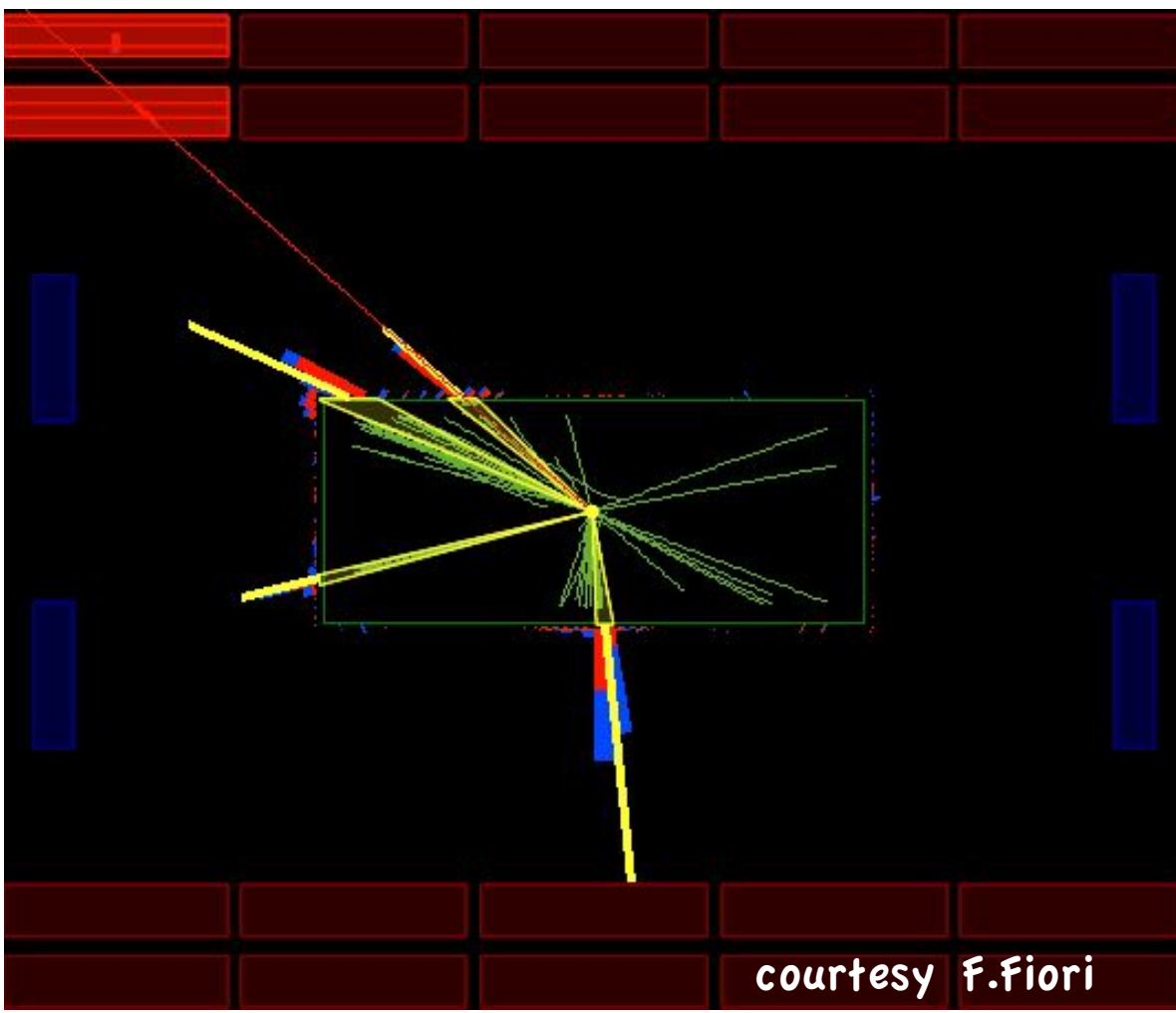
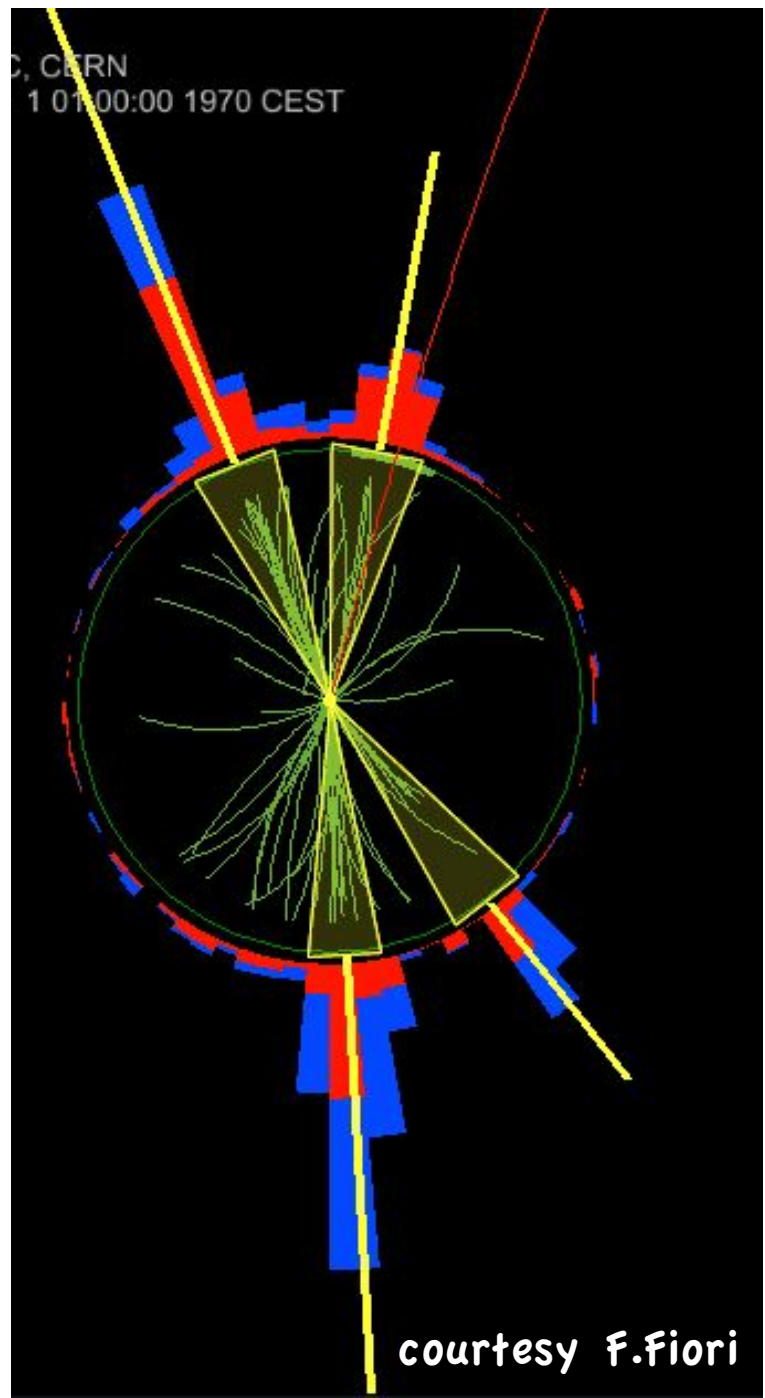


Hqq -> bbqq

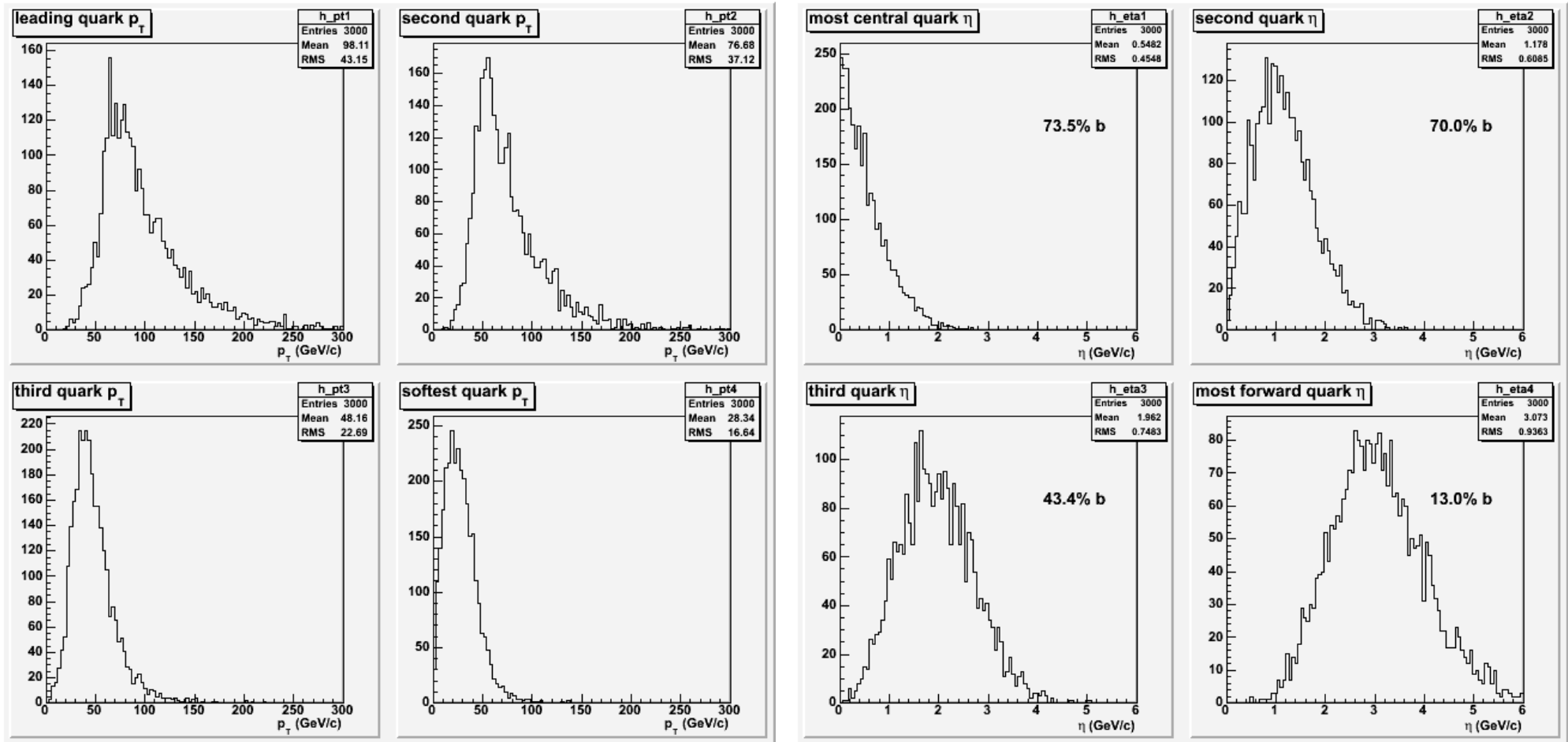


the usual suspects...

CMS Pisa 17/12/10



4-quarks kinematics

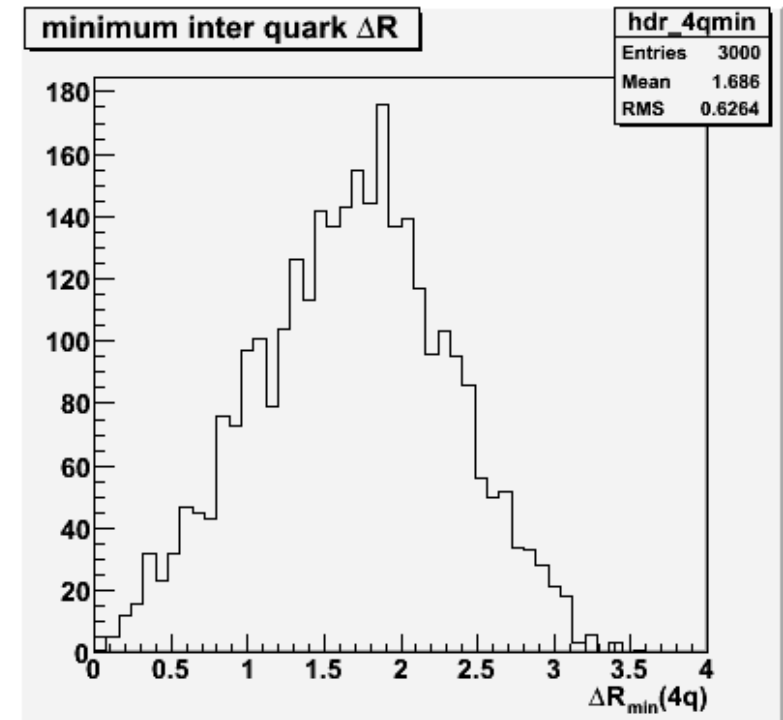
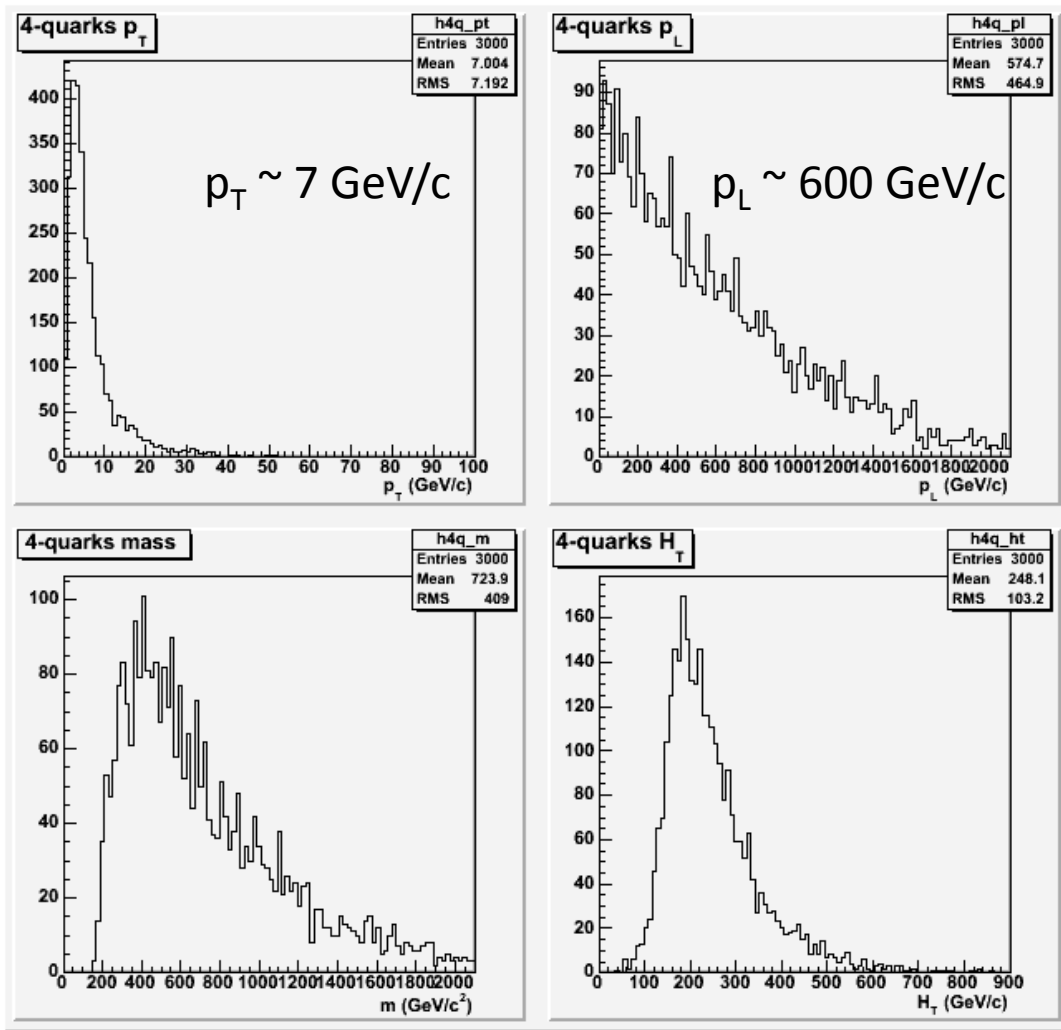


each quark has on average $\langle p_T \rangle \approx 60$ GeV/c

the two most central partons can be:

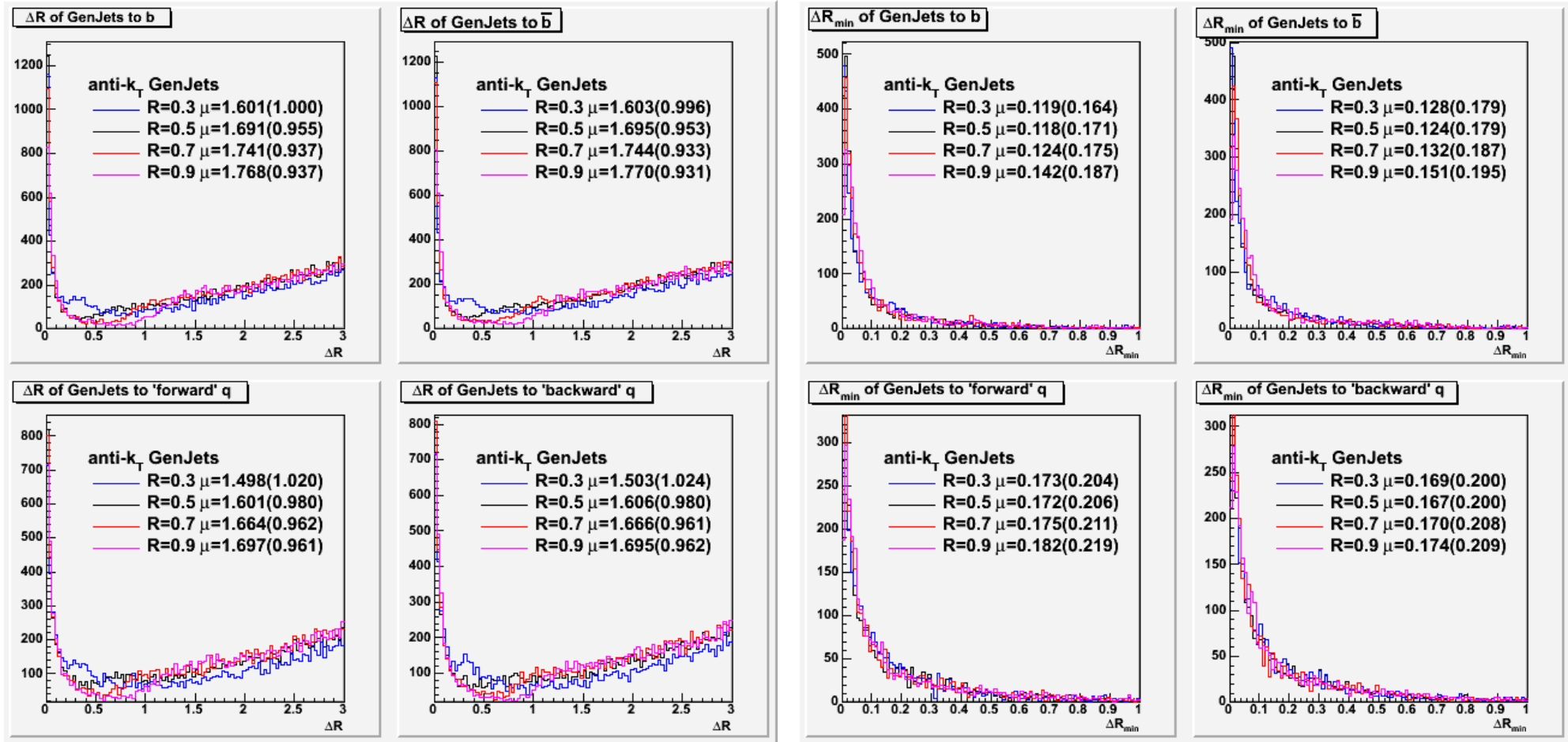
- the two b-quarks (45%)
- one b-quark and one associated-quark (54%)
- the two associated-quarks (1%)

4-quarks kinematics



In 83%(97%) of signal events all six quark-pairs have $\Delta R > 1(0.5)$

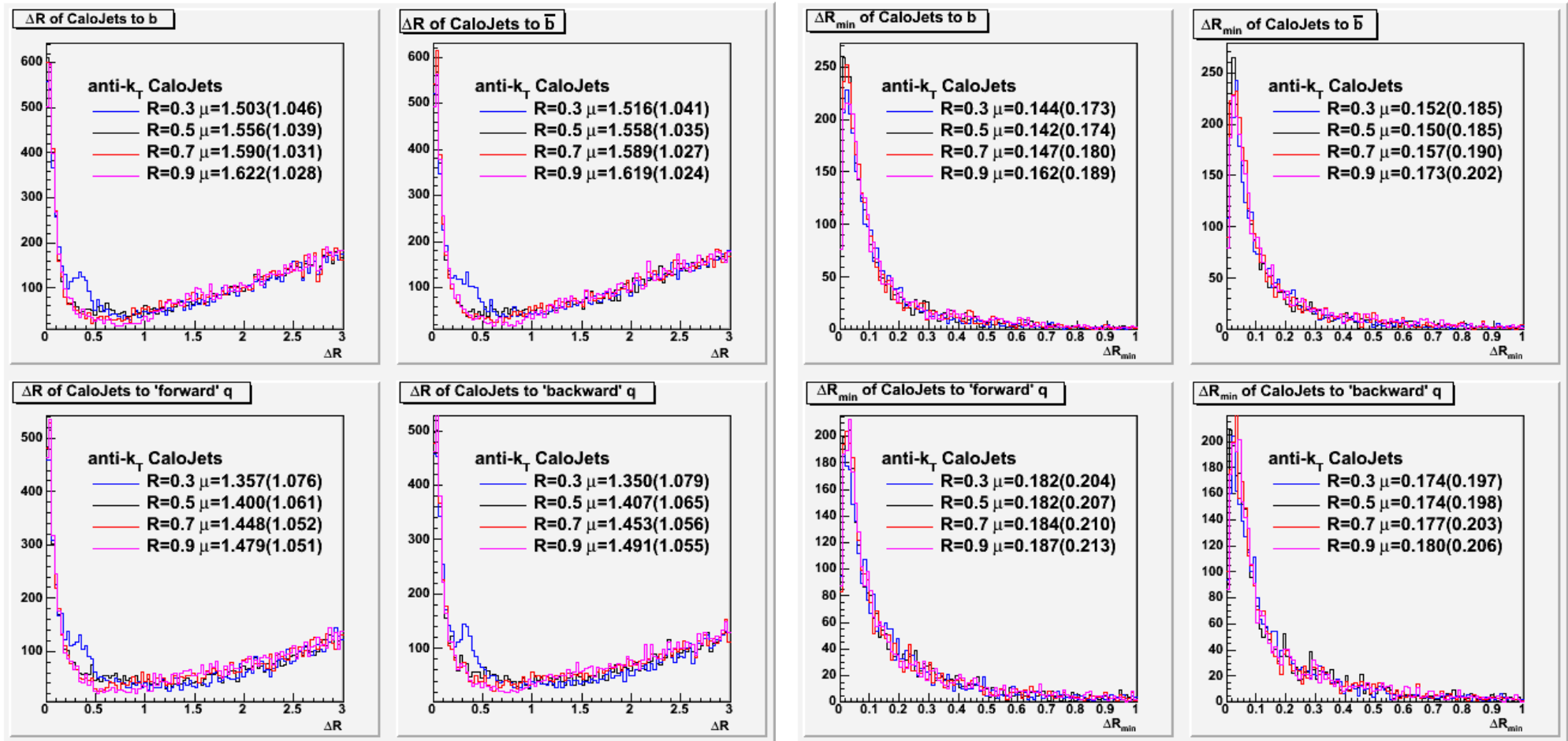
quark-GenJet matching



all jets

closest jet

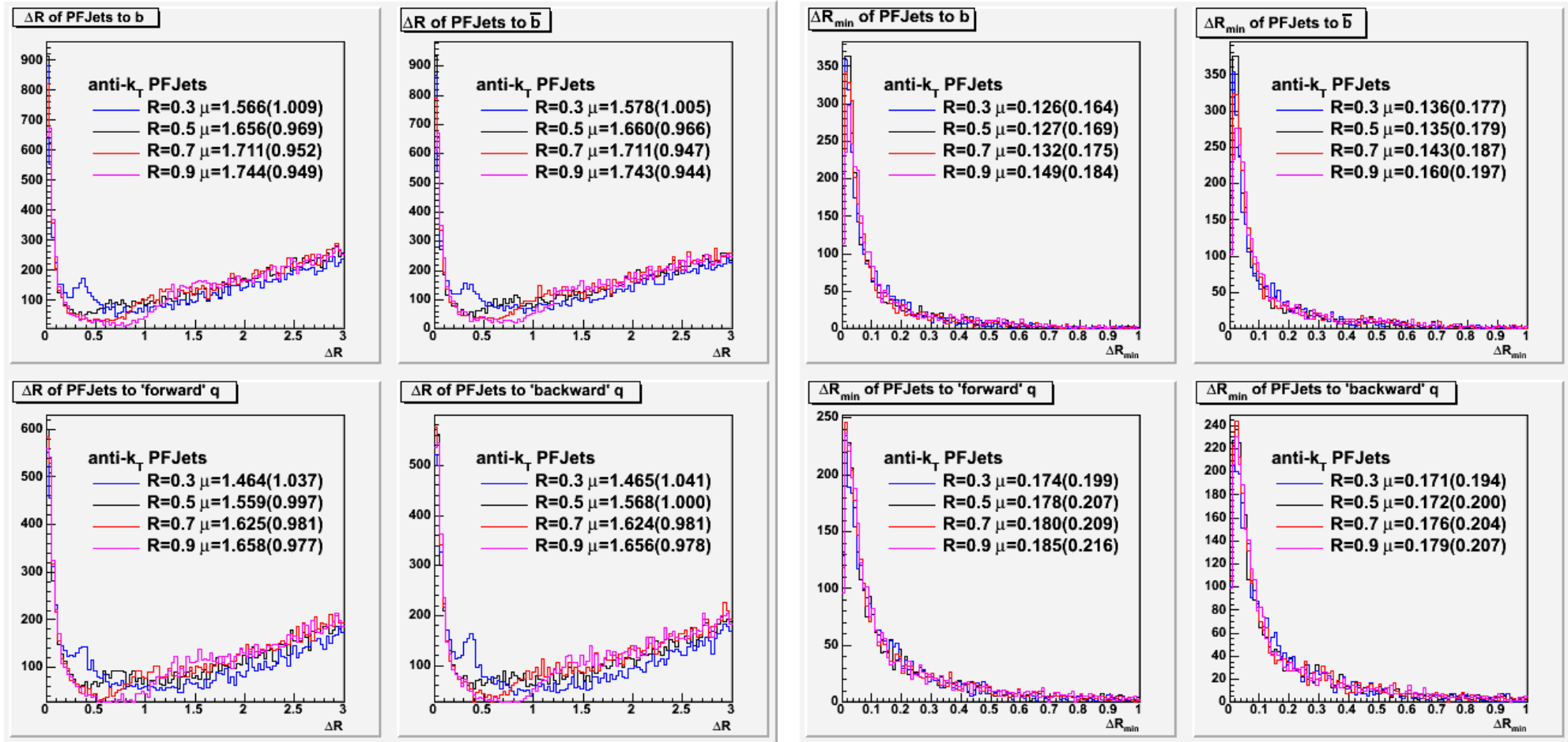
quark-CaloJet matching



all jets

closest jet

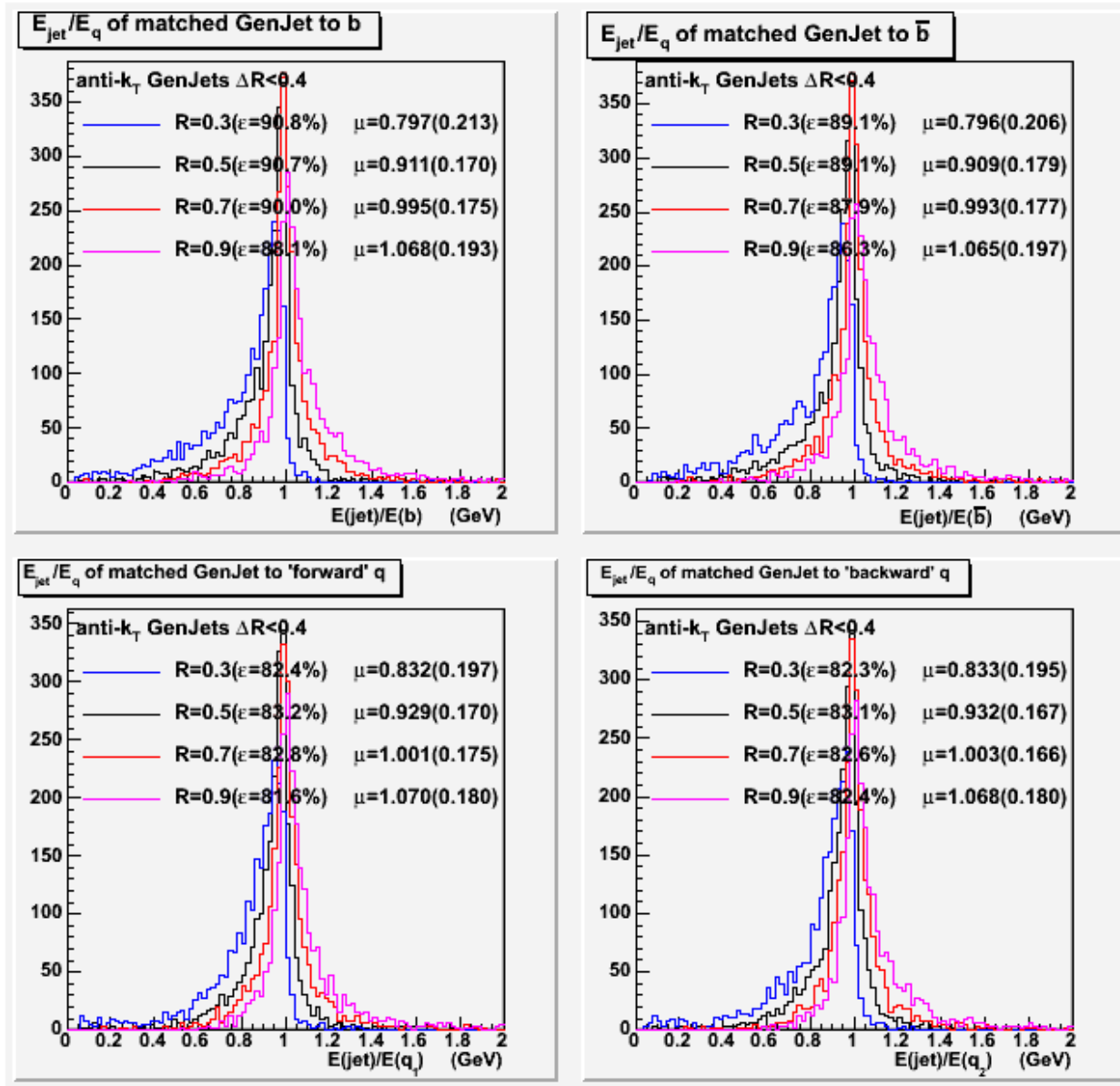
quark-PFJet matching



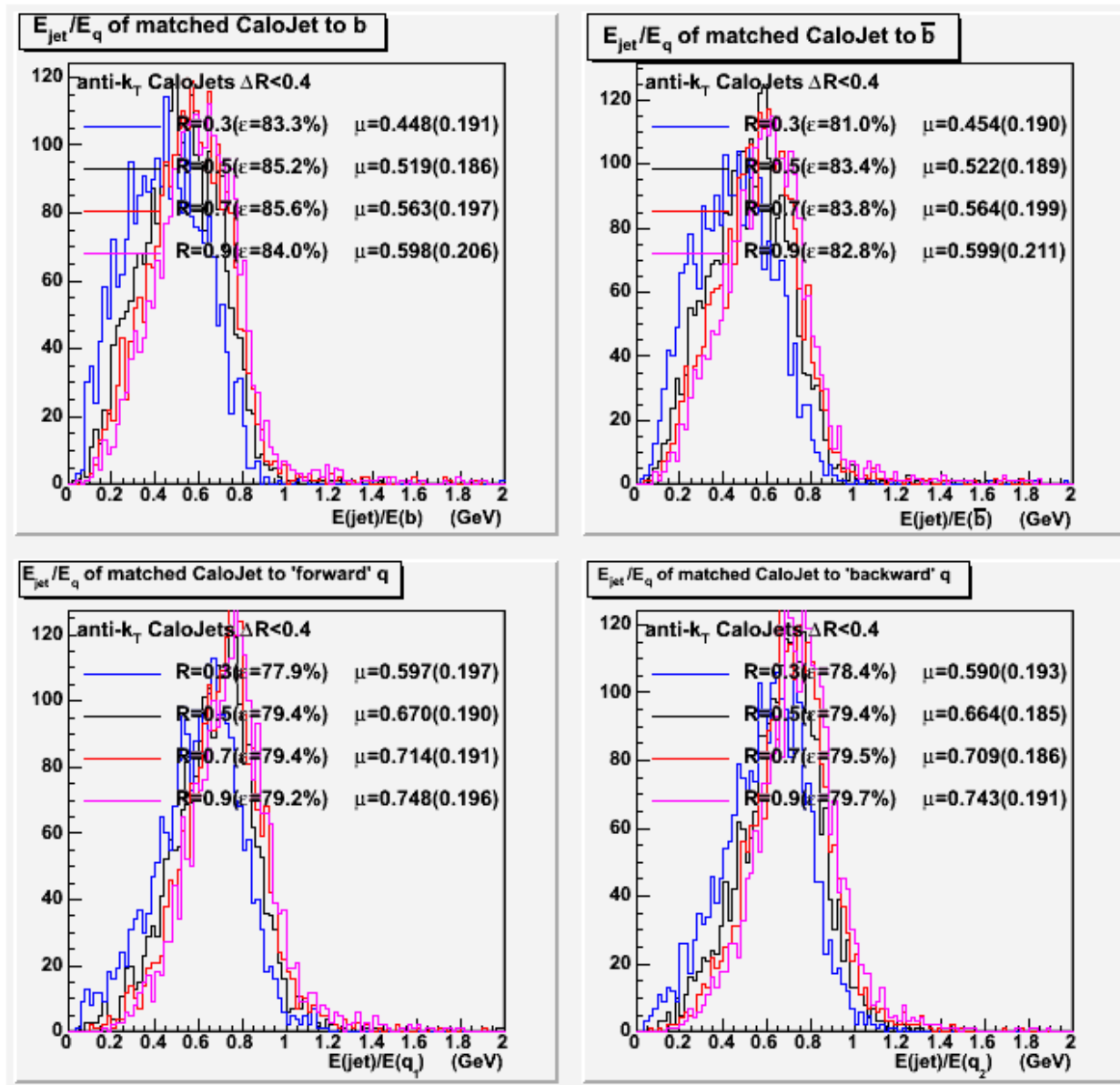
all jets

closest jet

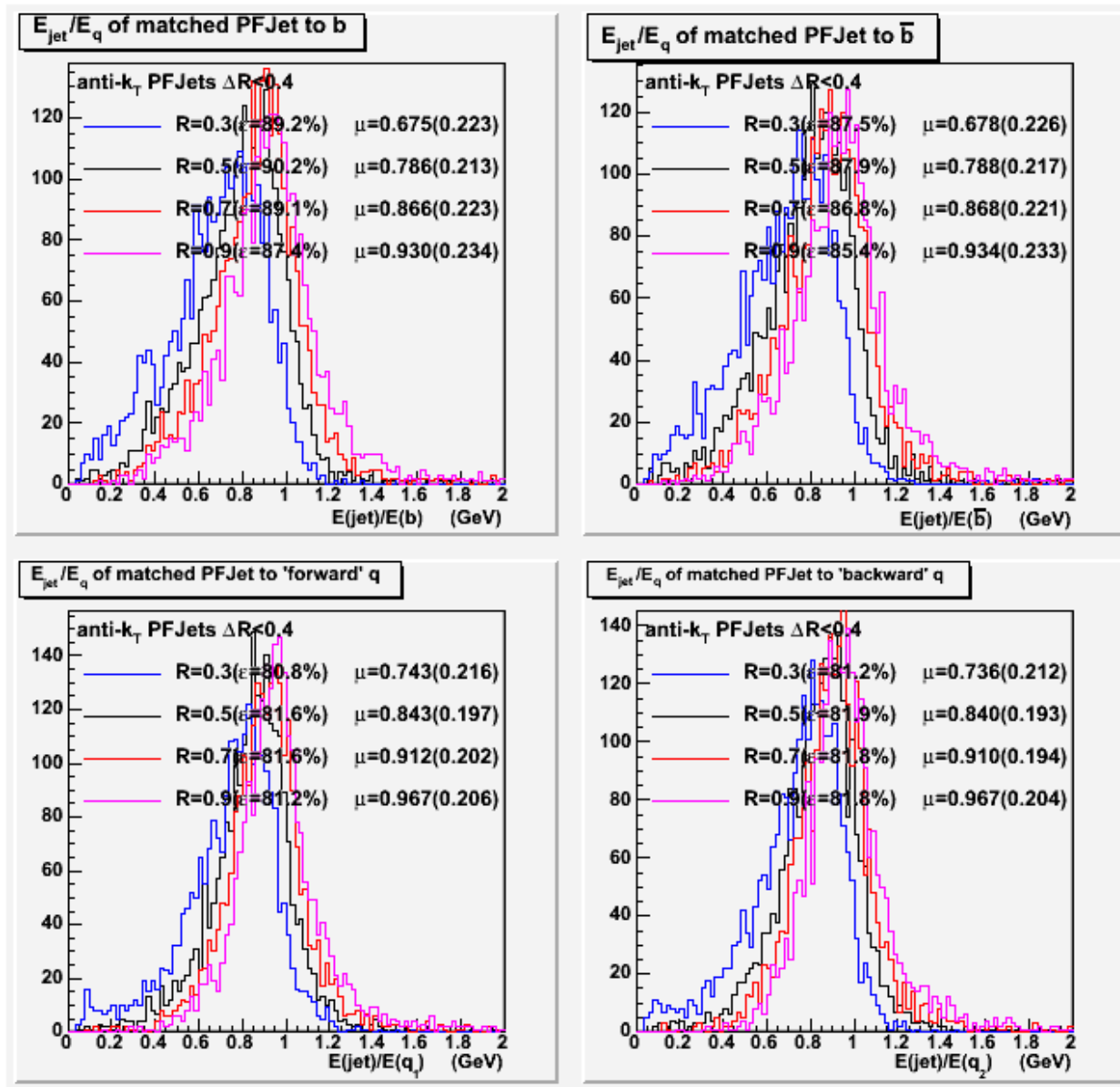
quark-GenJet Energy Resolution



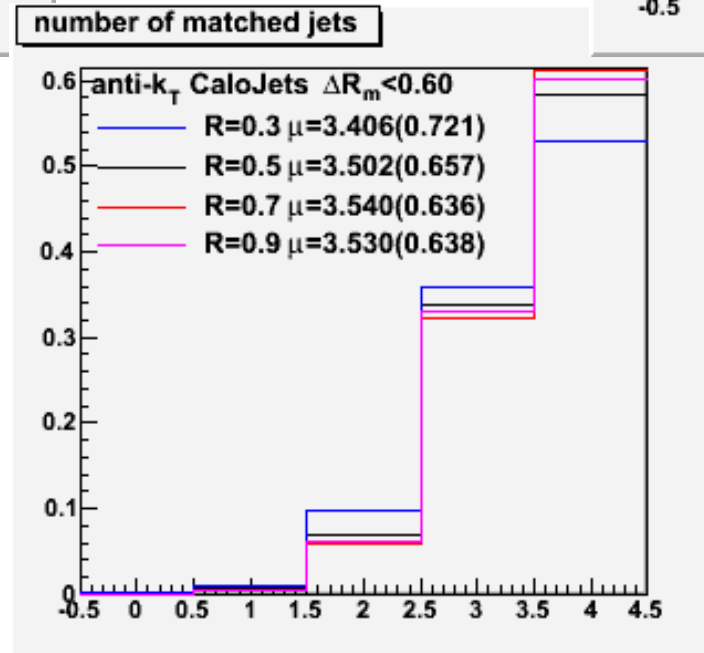
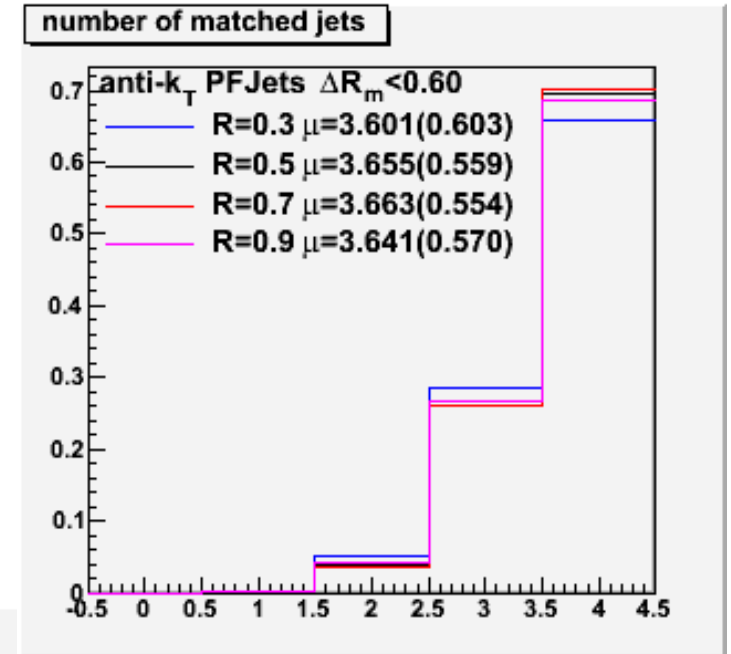
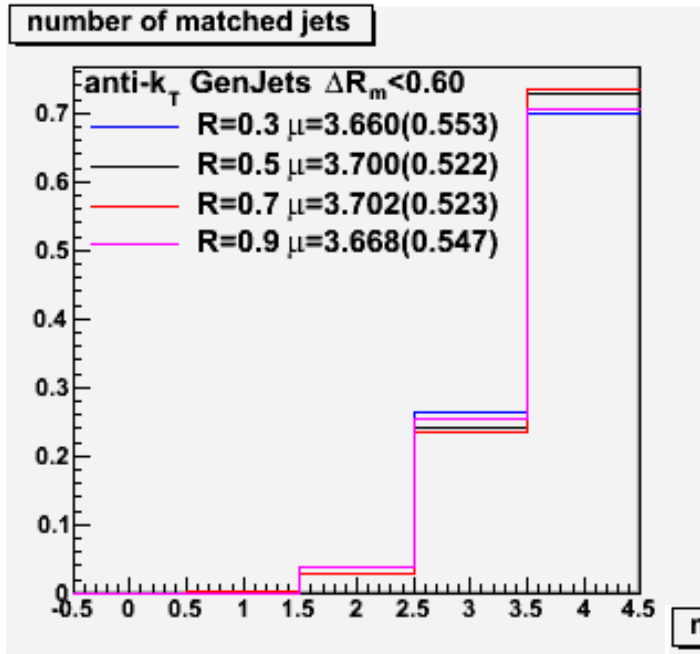
quark-CaloJet Energy Resolution



quark-PFJet Energy Resolution

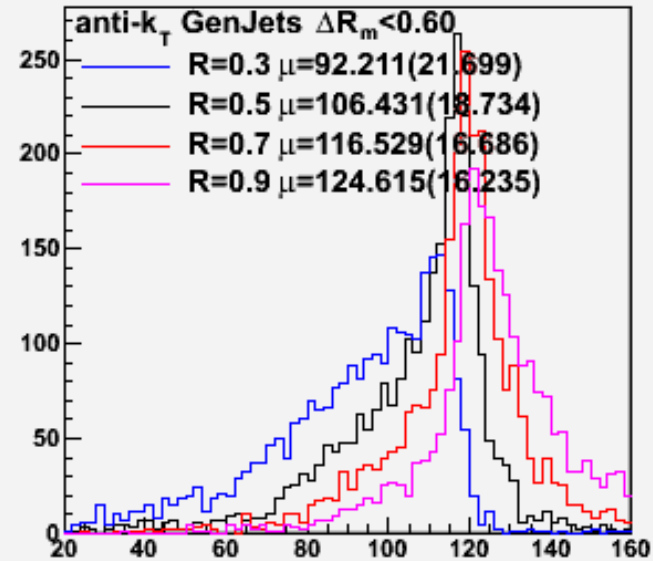


number of matched jets

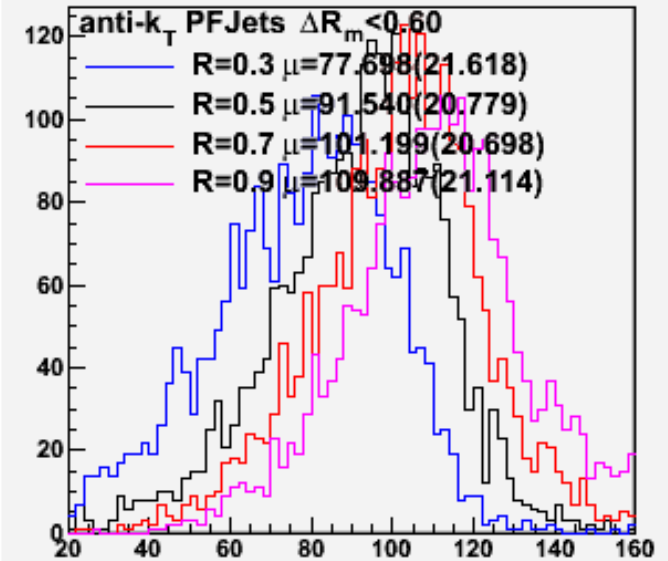


higgs di-jet mass

higgs di-jet mass



higgs di-jet mass



higgs di-jet mass

