L1/L2 JETS RATE

- Particle level jets
- L1, L2 raw rates
- 95% efficiency E_T threshold
- L1, L2 rates corrected for 95% efficiency E_T threshold
- L1 / L2 rate ratio

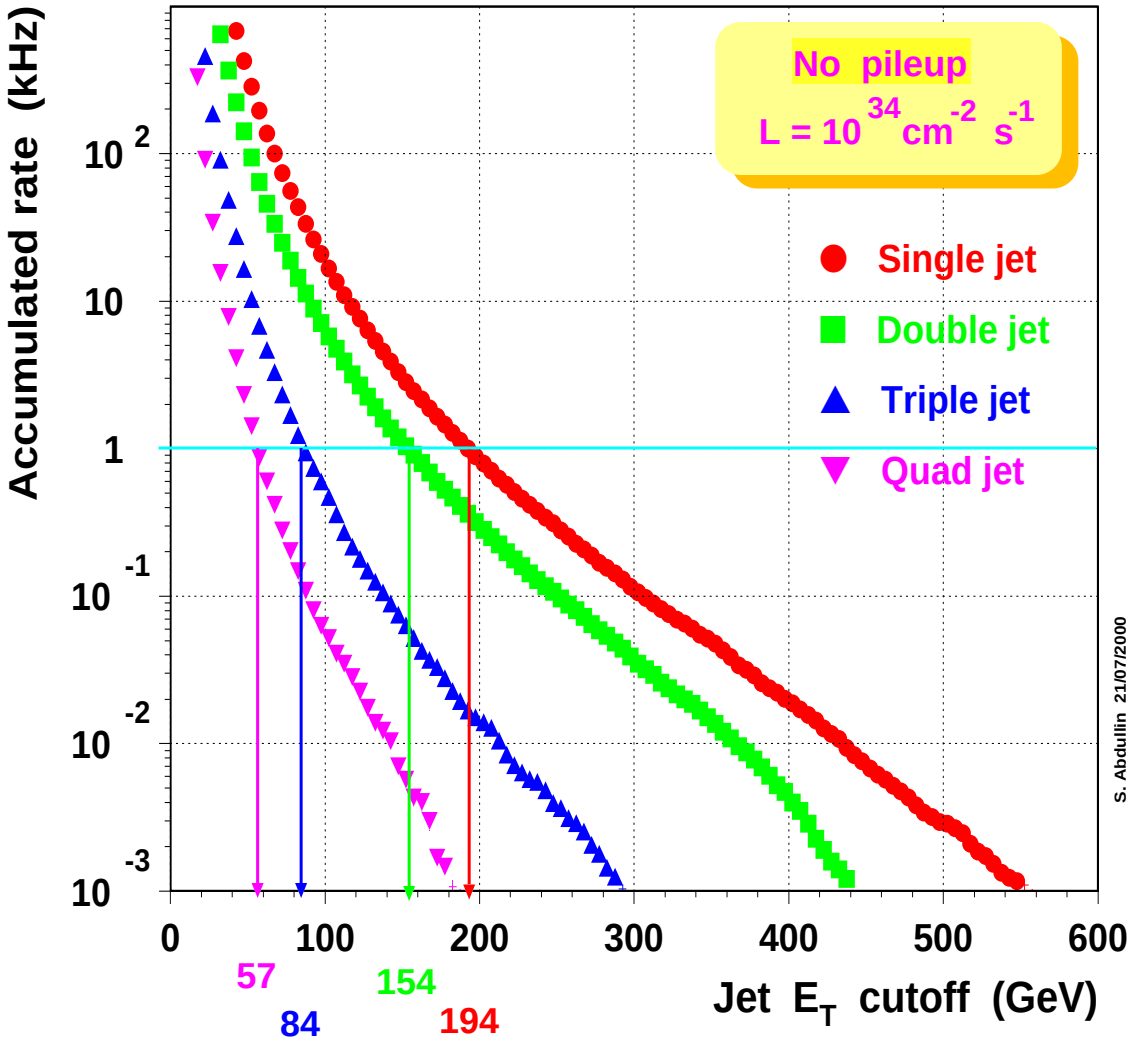
QCD pt bins with full pile up

Basic address : /shift/shift19/data3/zh/cmsjet/hlt/

File(s)	Number of files (N)	Total statistics (ev)	Comments
1015/hlt1015_xx.ntup	95	94 798	"xx" = 1, ..., N
1520/hlt1520_xx.ntup	87	128 414	
2030/hlt2030_xx.ntup	141	206 081	
3050/hlt3050_xx.ntup	68	99 274	
5080/hlt5080_xx.ntup	22	32 043	
80120/hlt80120_xx.ntup	11	16 140	
120170/hlt120170_xx.ntup	8	11 358	
170230/hlt170230_xx.ntup	1	1 280	
230300/hlt230300_xx.ntup	1	1 280	
300380/hlt300380_xx.ntup	1	1 280	
380470/hlt380470_xx.ntup	1	1 360	

PARTICLE LEVEL JET RATES

ORCA 4 particle-level jet rate



- **Nice match with Shuichi's calculation**

  November, 1999

  See p.5 in Sasha Nikitenko's talk

  http://cmsdoc.cern.ch/cms/TRIDAS/distribution/Meetings/TriDAS.workshops/99.11.04/Agenda.html

- **By a factor of 2-3 higher than Sridhara's one**

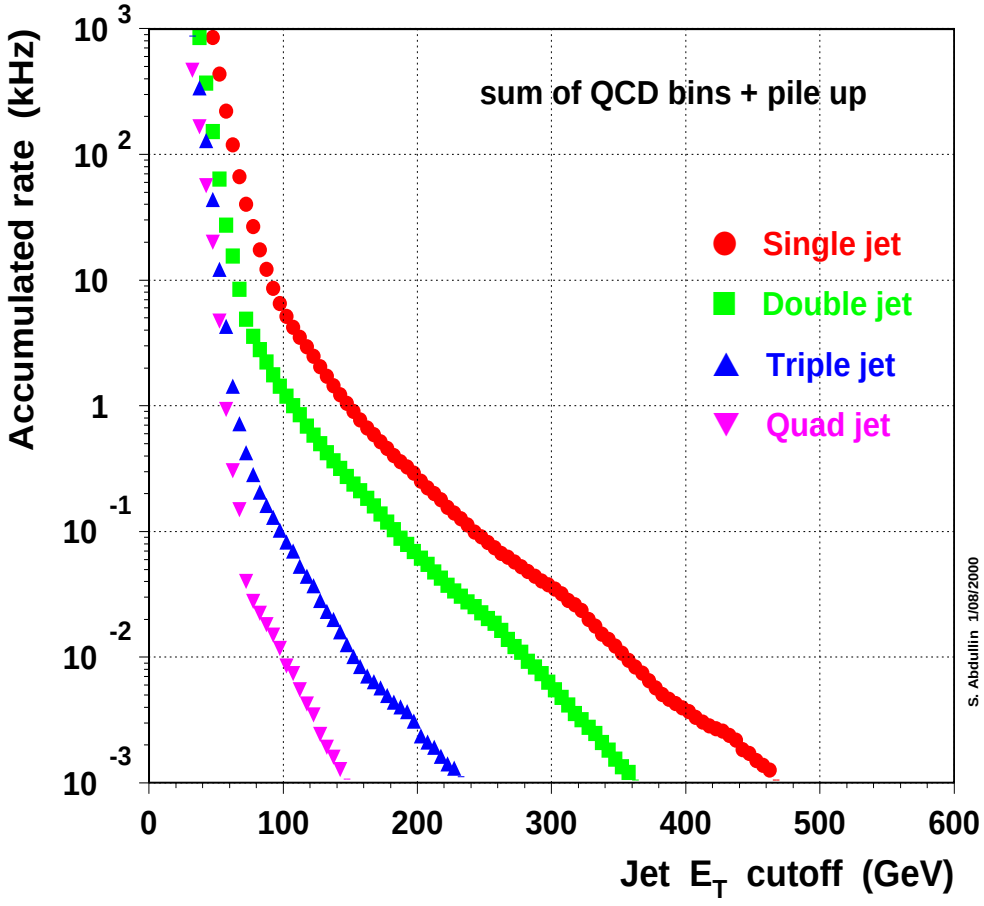
  December, 1999. See p.2 in

  http://home.fnal.gov/~sceno/jpg/minutes/dec141999/dasu-sim-7Dec99.pdf

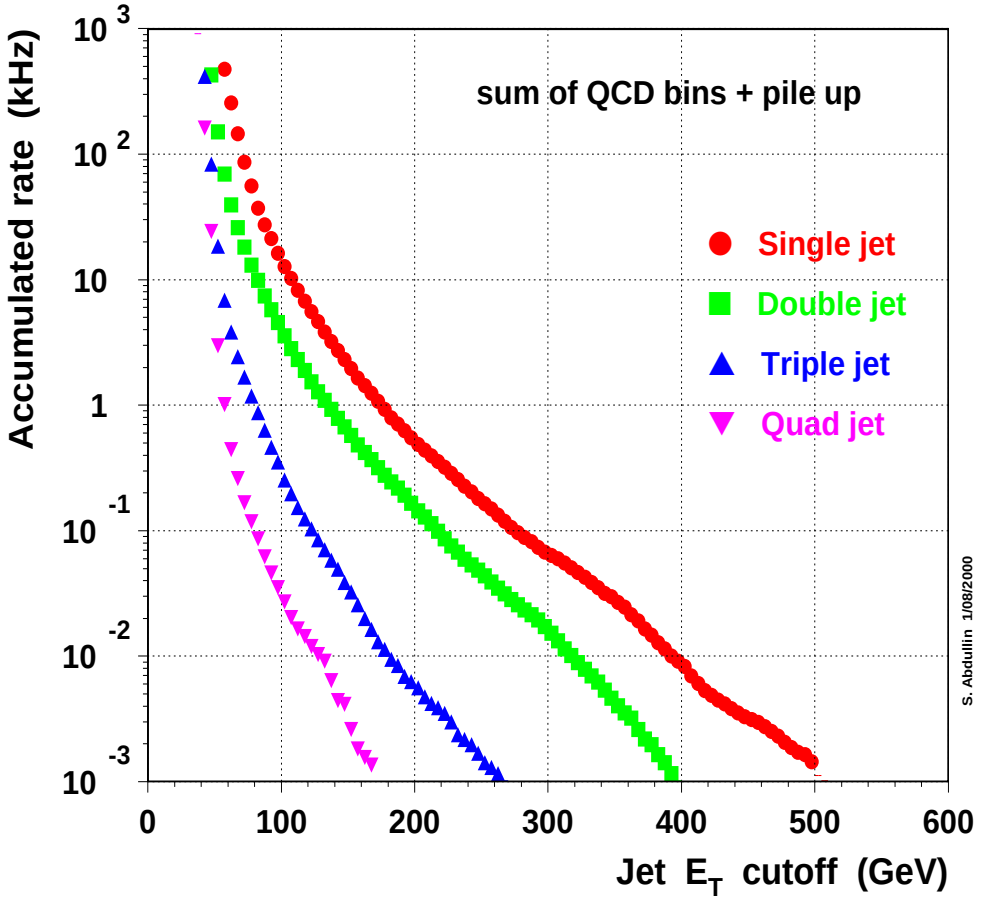
L1 AND L2 RAW JETS RATE

IterativeConeAlgo R=0.5

ORCA 4 L1 jet rate



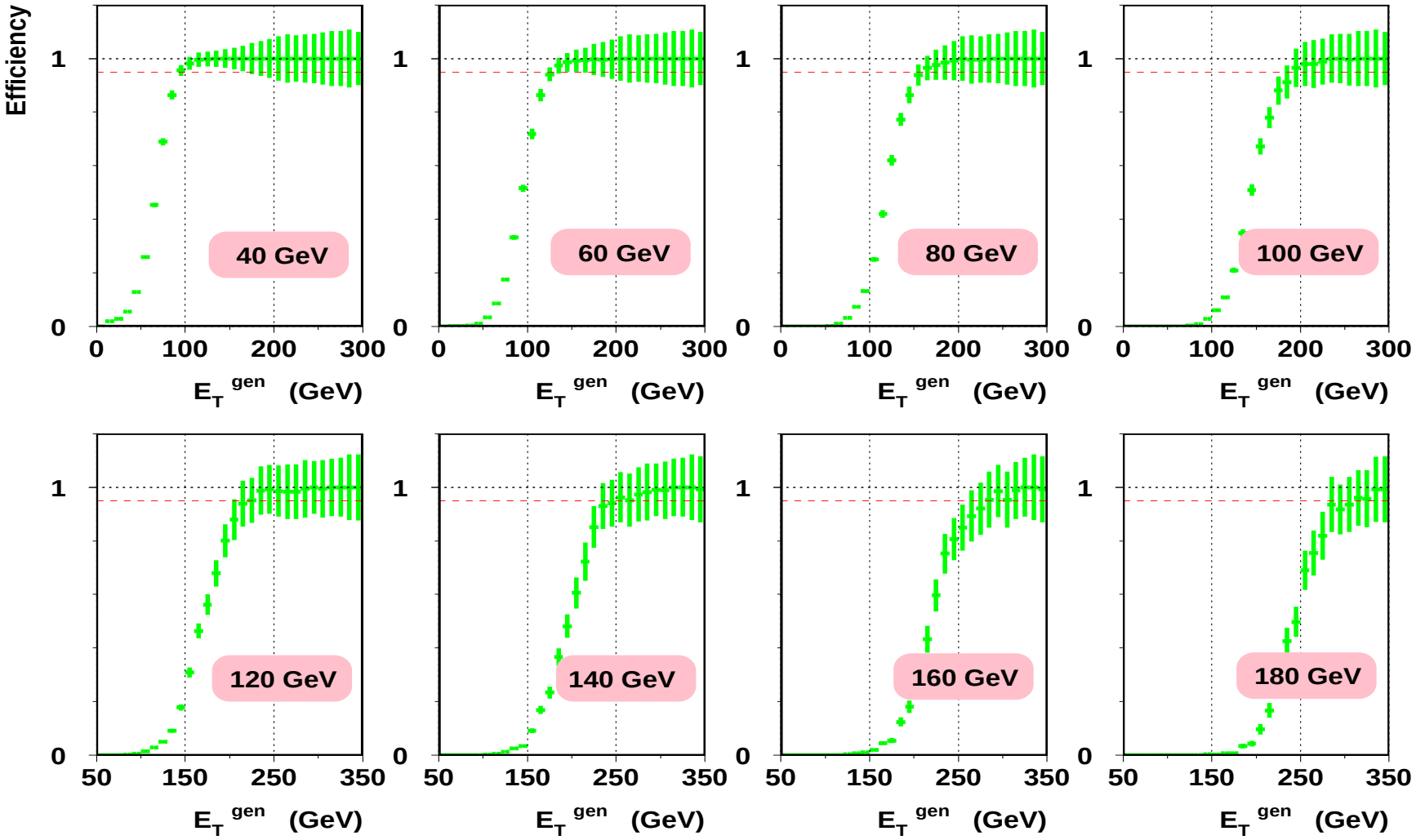
ORCA 4 L2 jet rate



EcalPlusHcalTower input

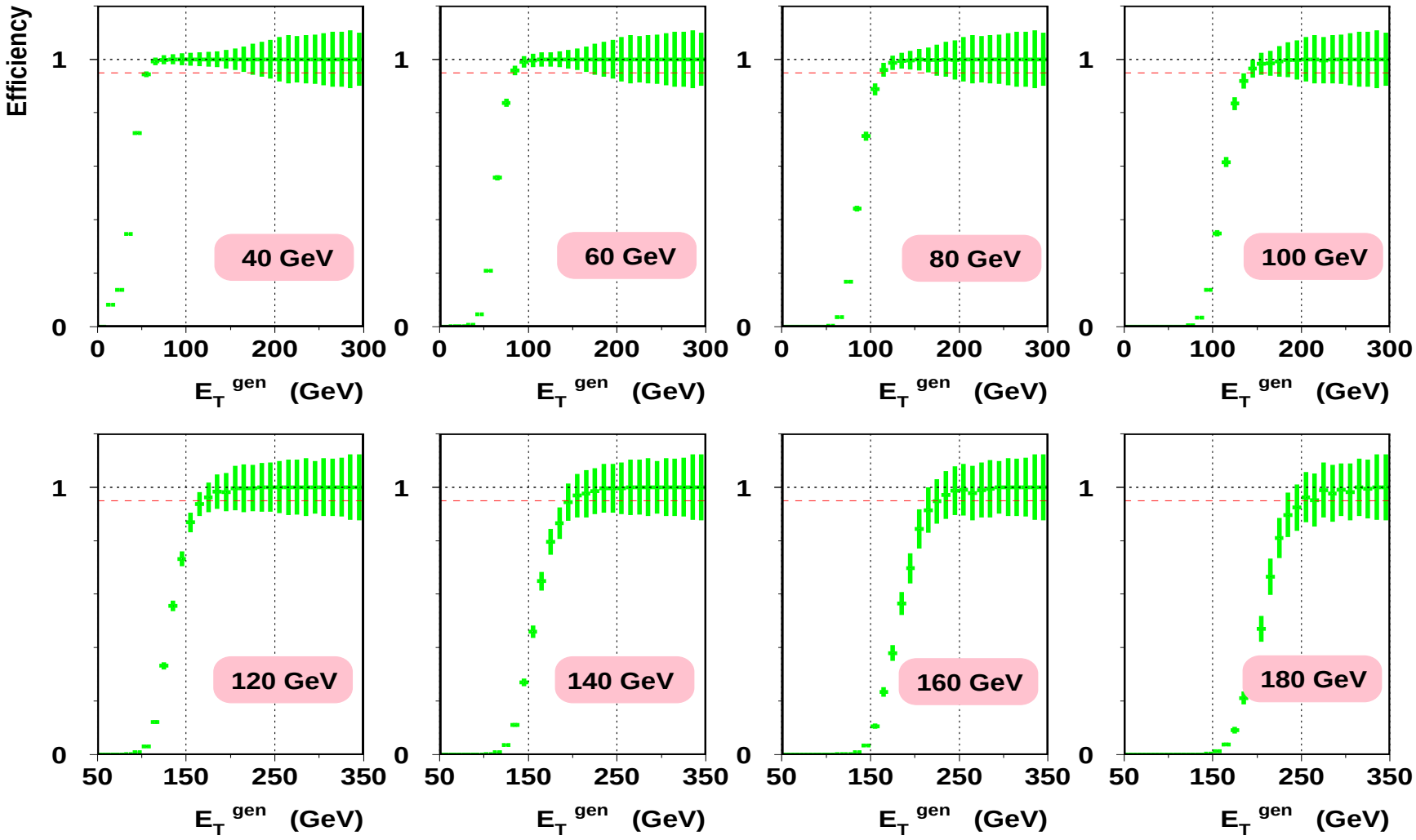
95% EFFICIENCY THRESHOLD FOR L1 JETS

L1 jets efficiency curves for various E_T thresholds

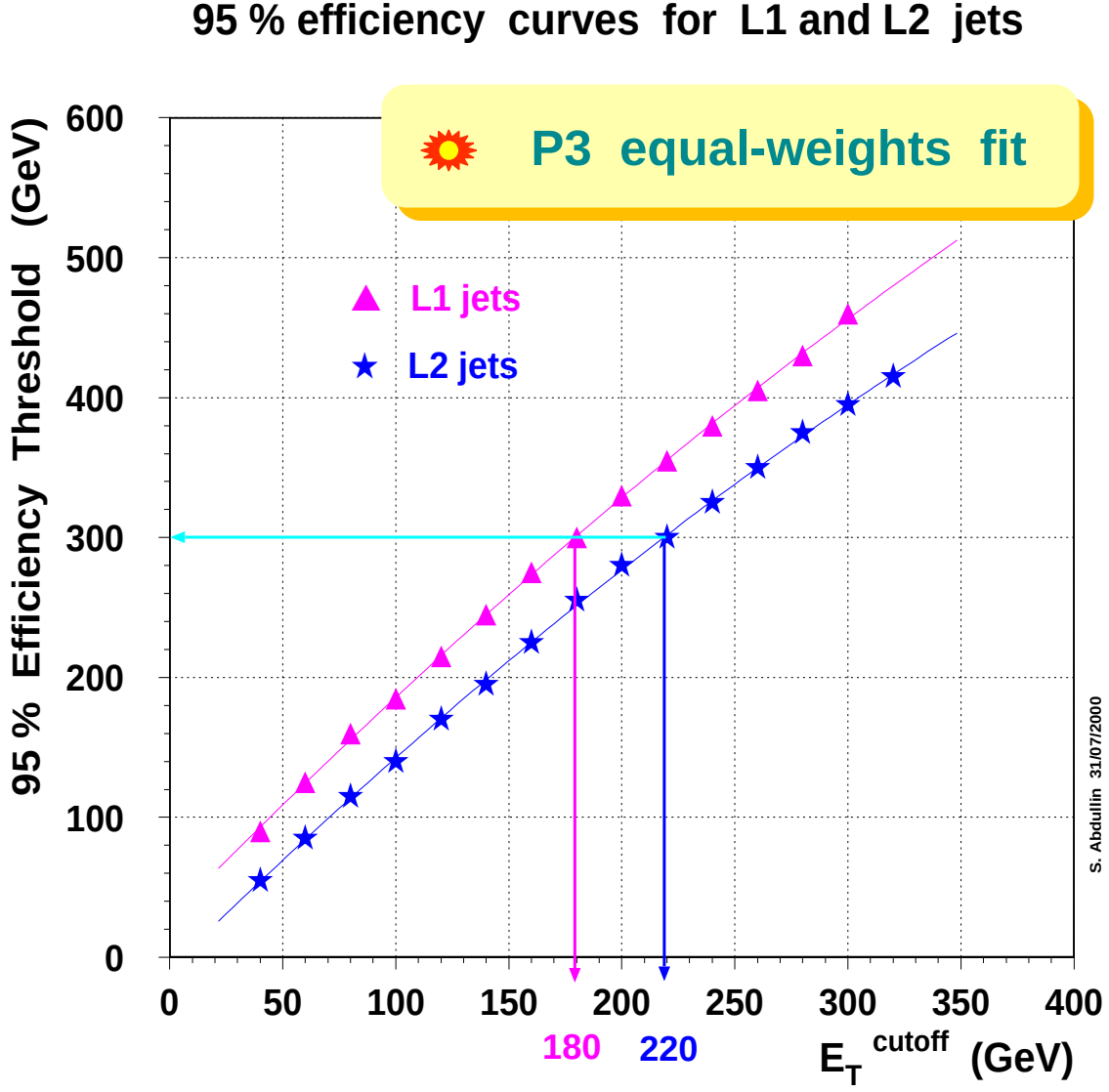


95% EFFICIENCY THRESHOLD FOR L2 JETS

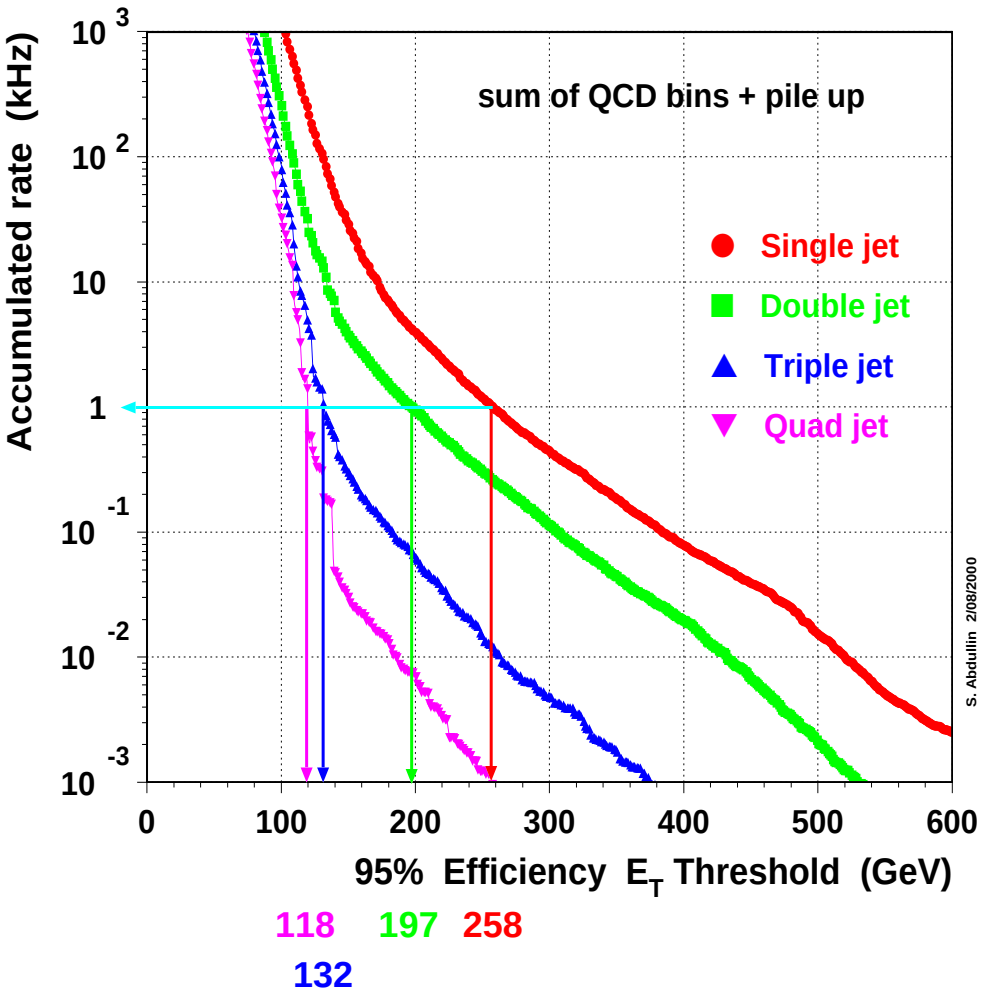
L2 jets efficiency curves for various E_T thresholds

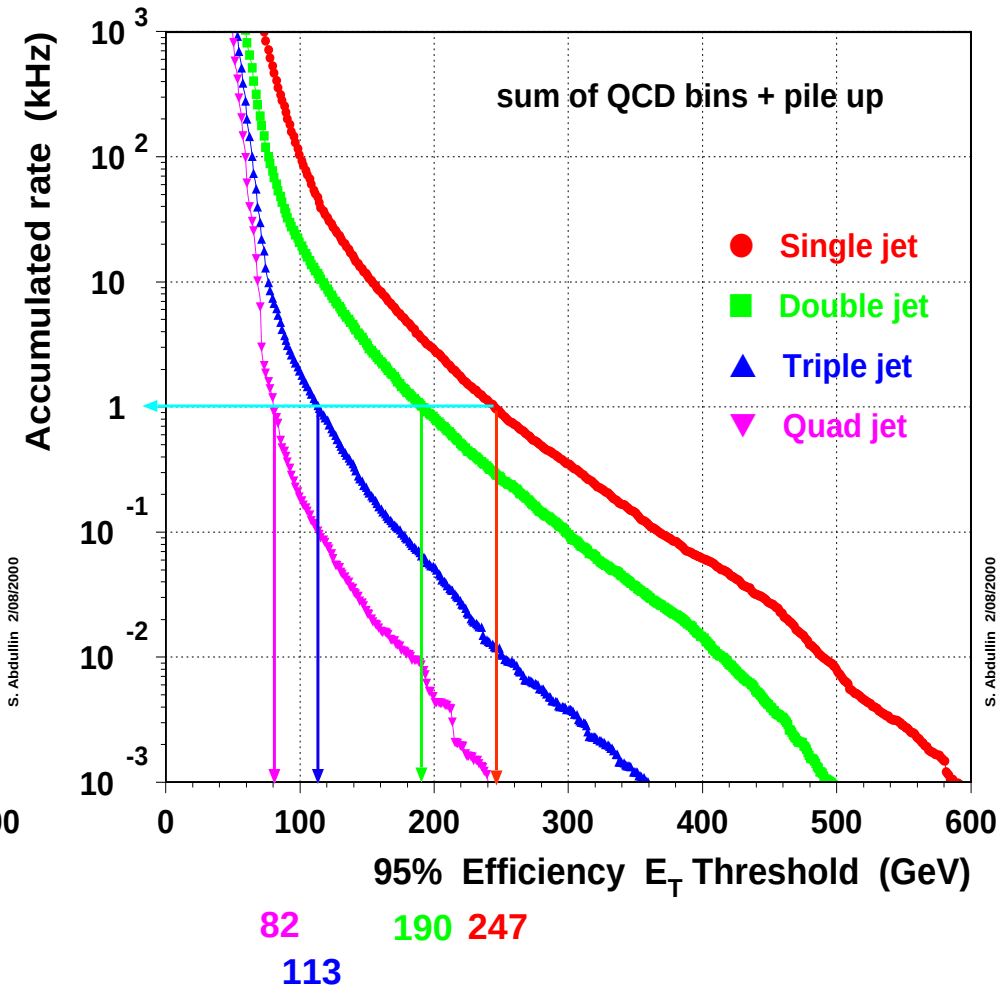


95% EFFICIENCY THRESHOLD EVALUATION

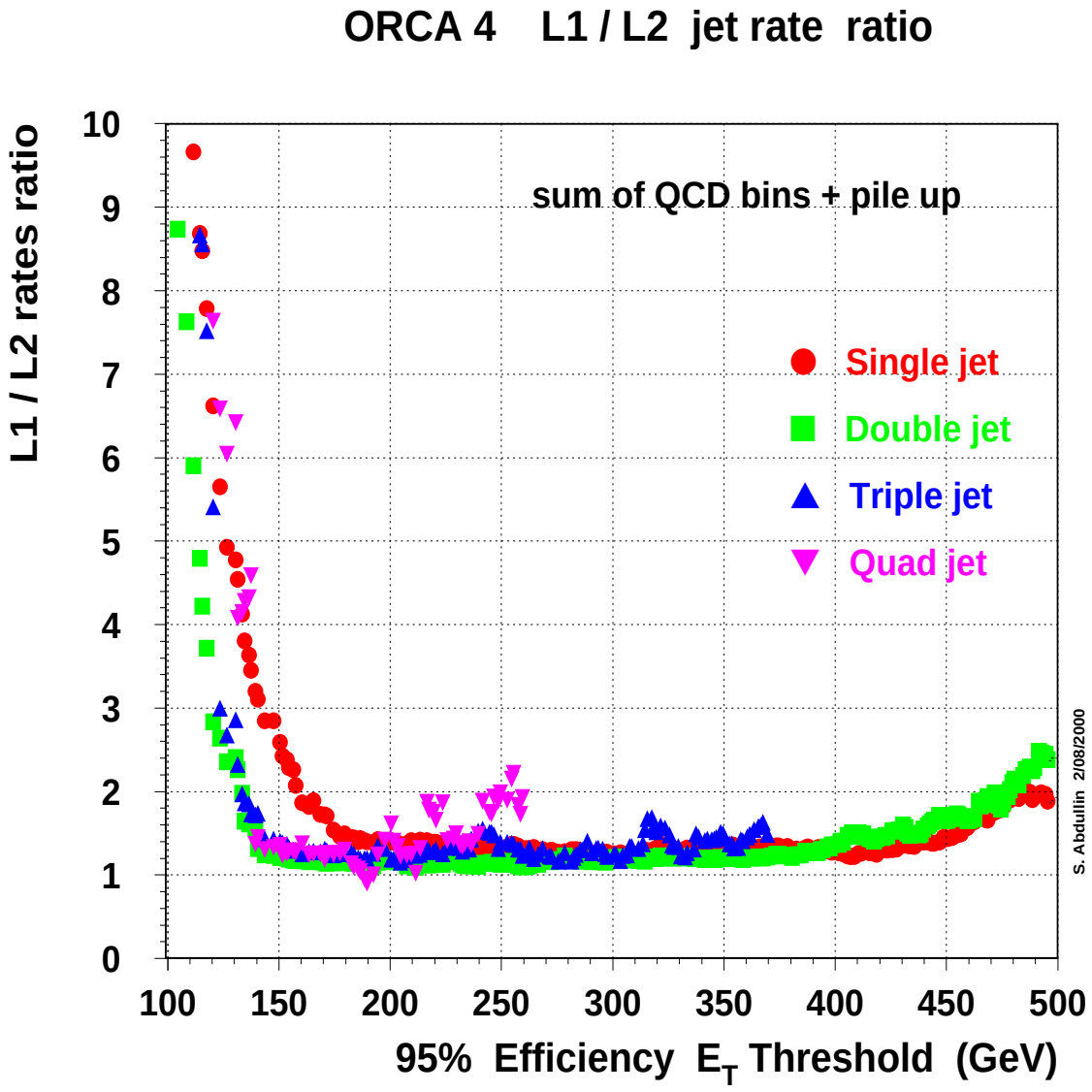


L1 AND L2 JET RATES





L1 / L2 RATIO


ORCA 4 L1 / L2 jet rate ratio
sum of QCD bins + pile up
Single jet
Double jet
Triple jet
Quad jet
L1 / L2 rates ratio
95% Efficiency E_T Threshold (GeV)
S. Abdullin 2/08/2000
0
1
2
3
4
5
6
7
8
9
10
100
150
200
250
300
350
400
450
500