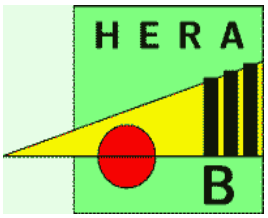
HERA-B Meeting February 1999
FLT Parallel Session



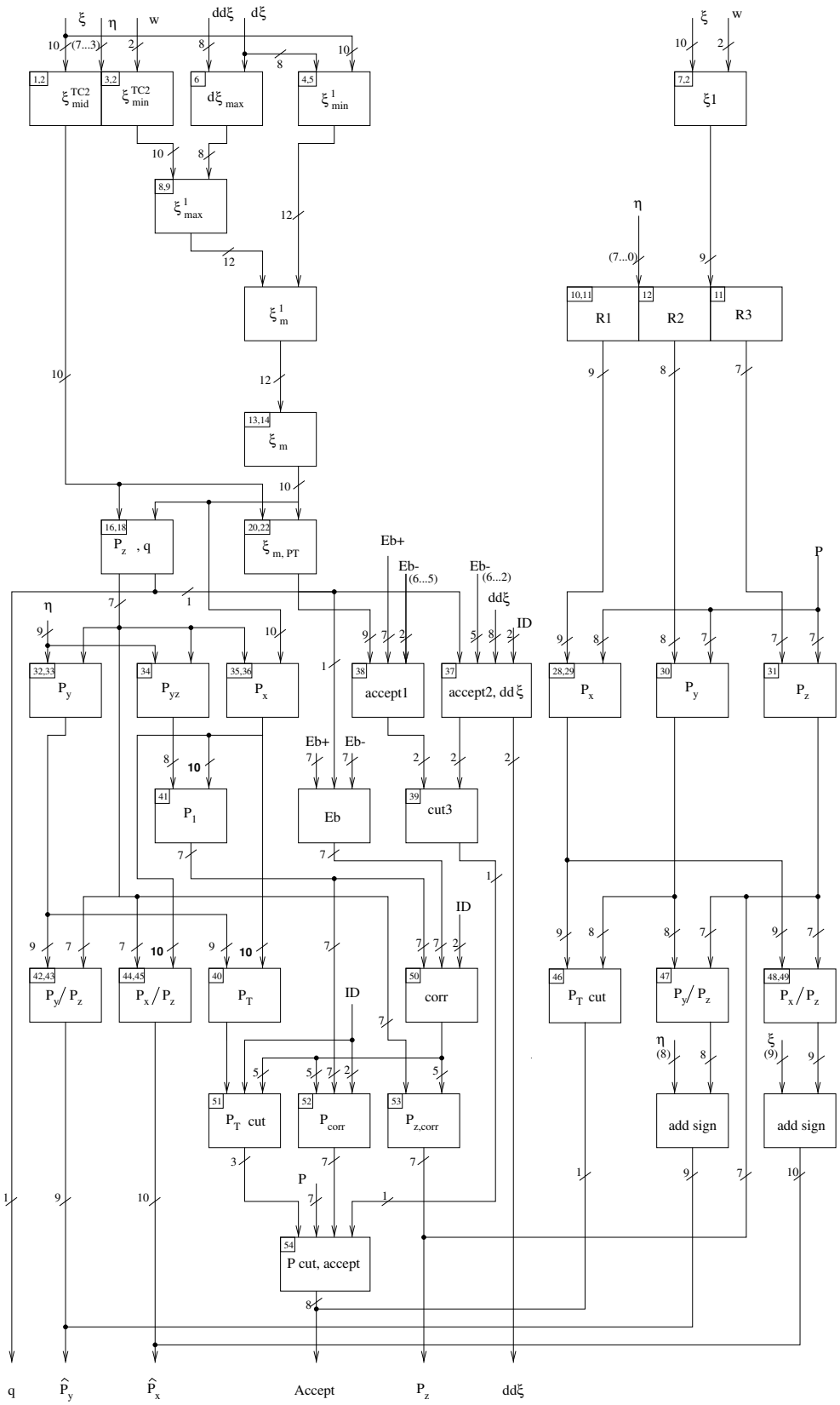
Analysis of the

TPU

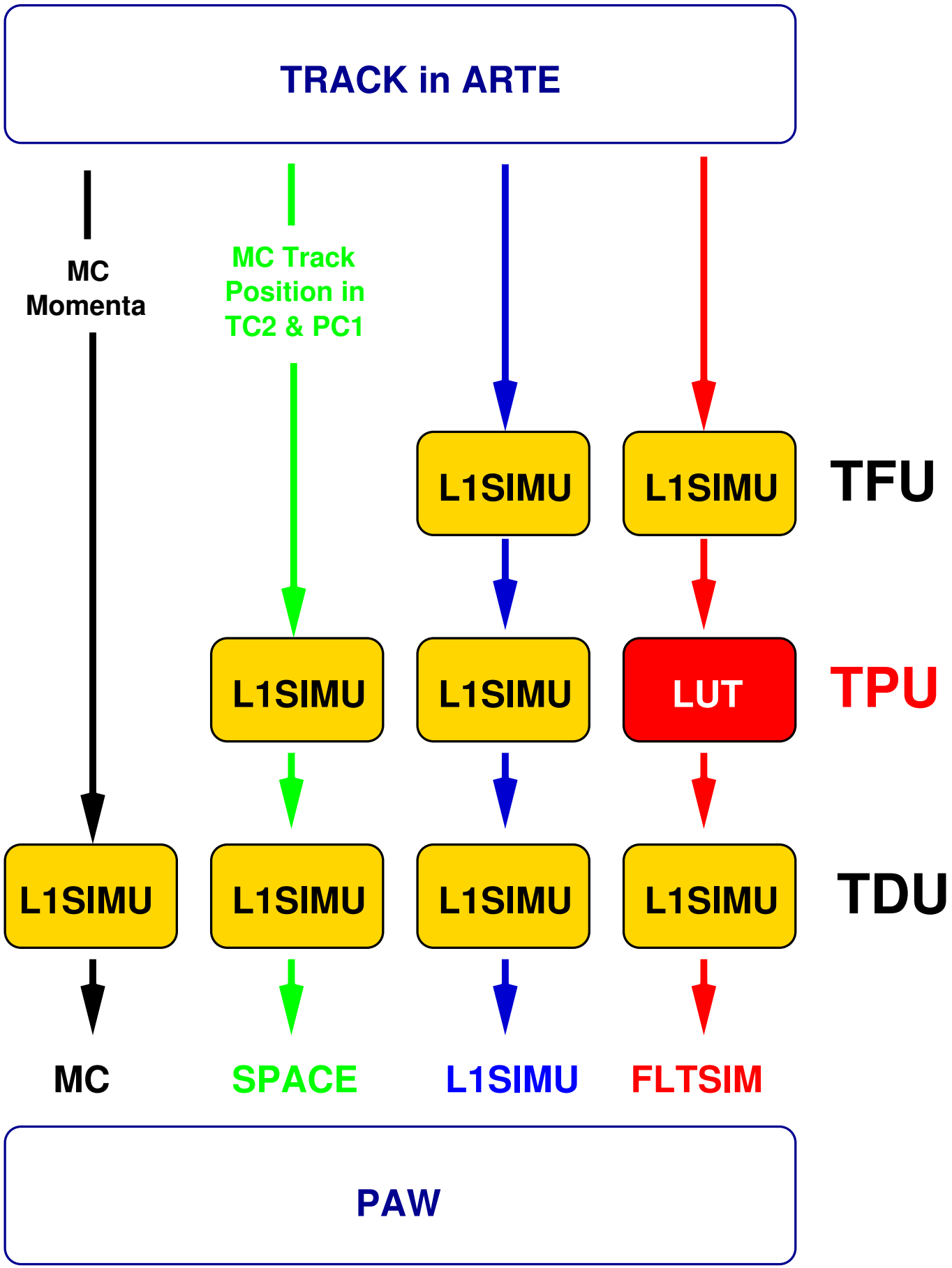
Performance

Joachim Flammer

TPU Lookup tables



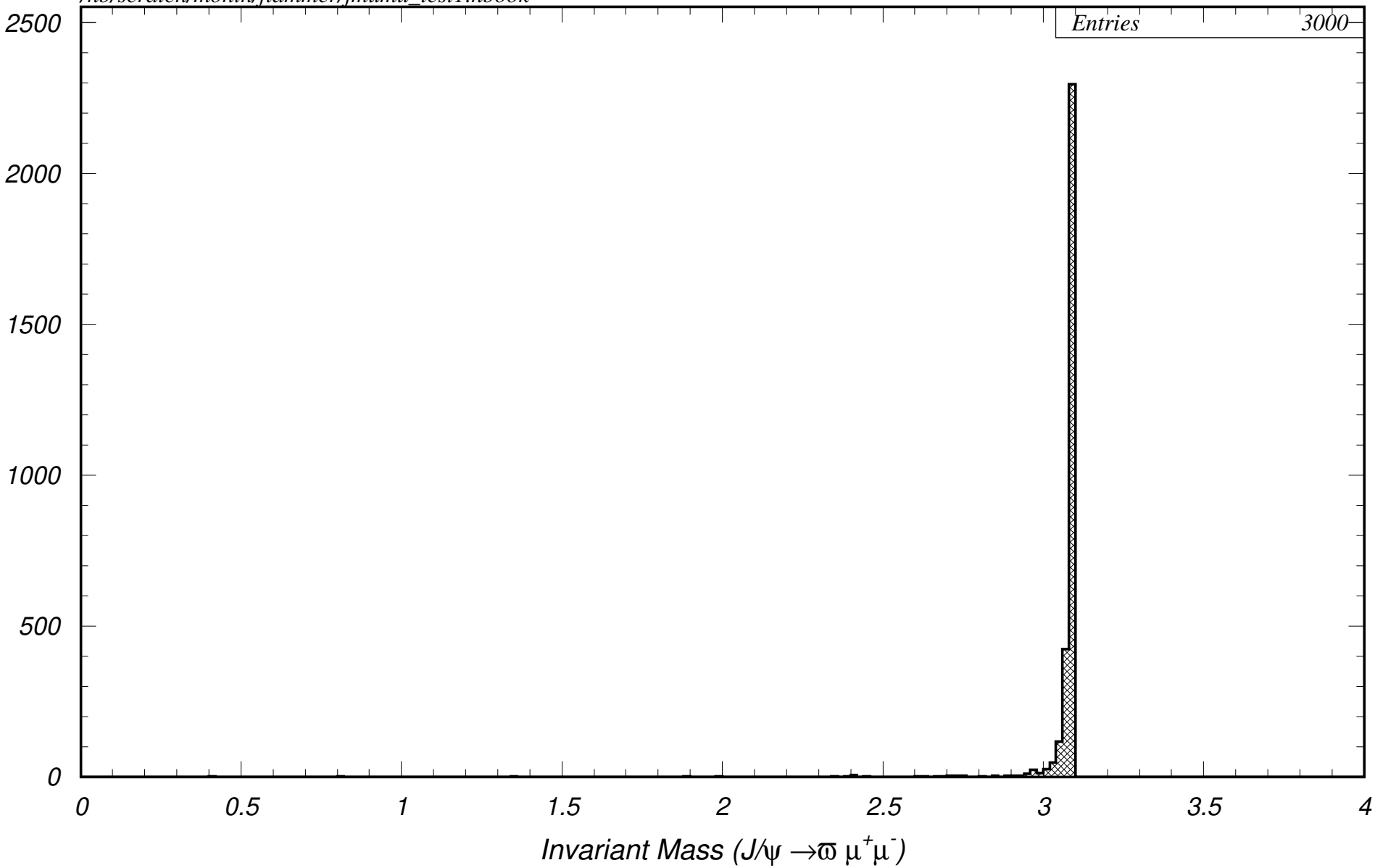
RECONSTRUCTION



99/02/08 12.36

MC

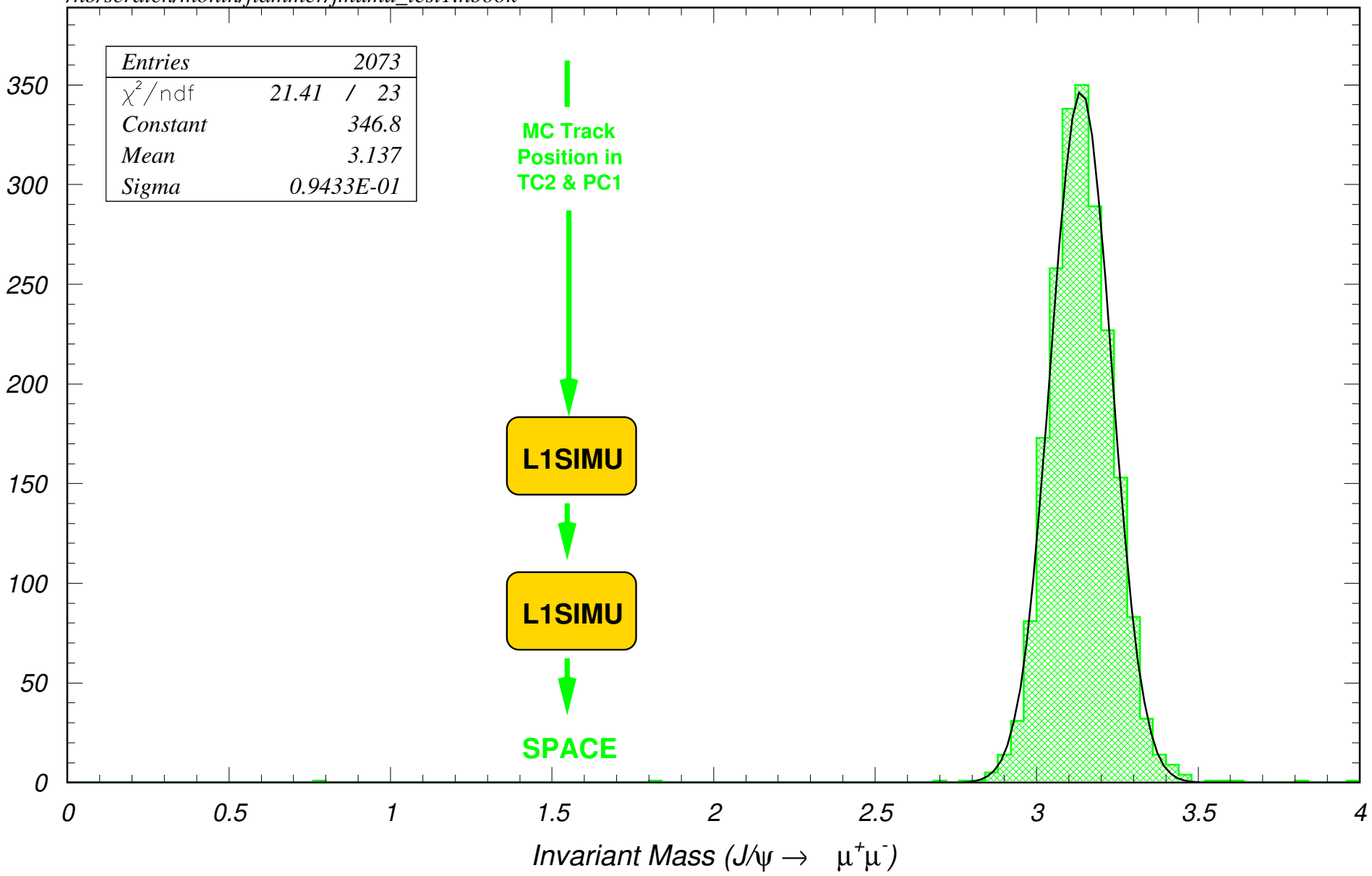
/hb/scratch/month/flammer/jmumu_test1.hbook



99/02/08 12.36

SPACE

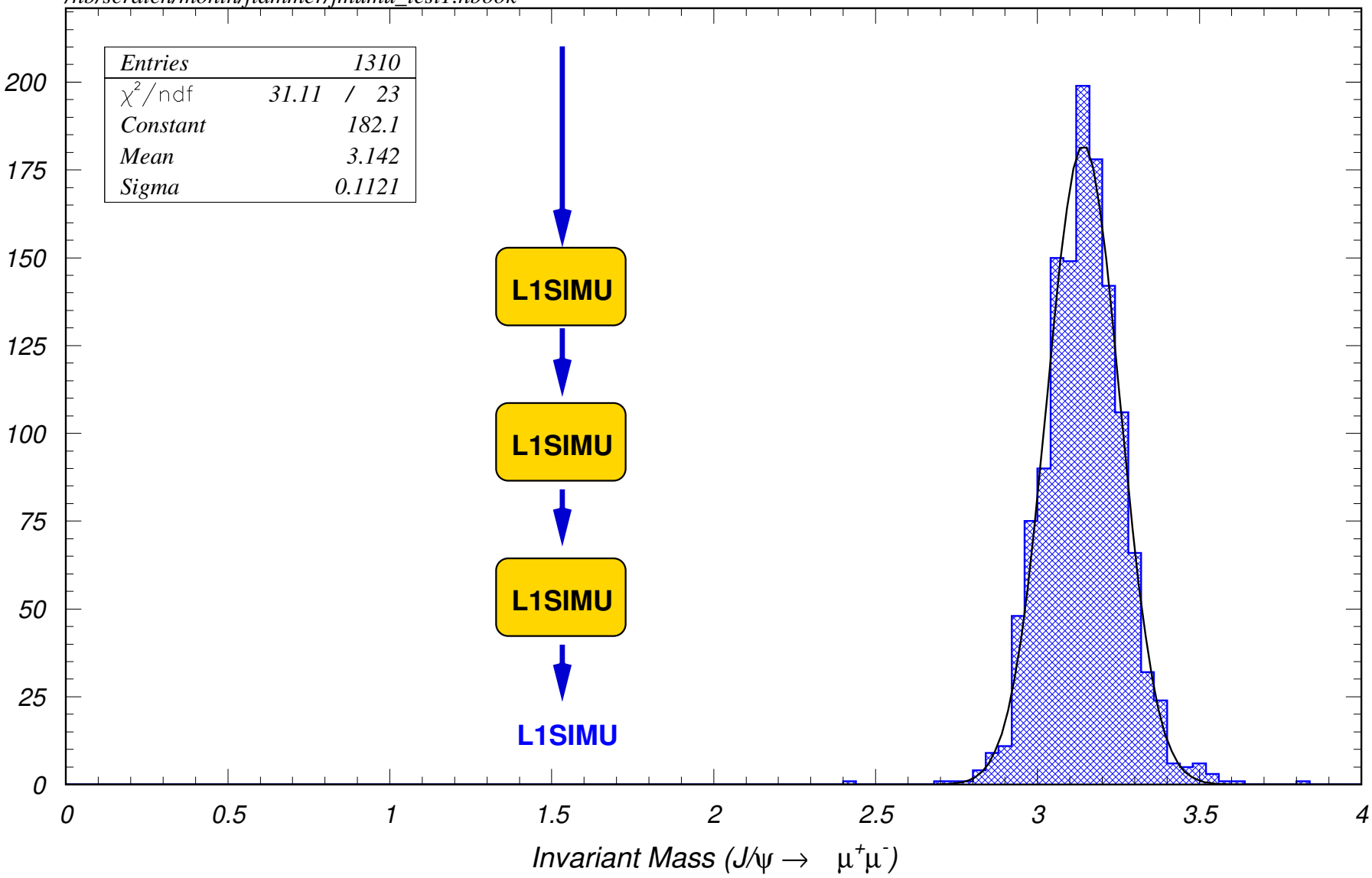
/hb/scratch/month/flammer/jmumu_test1.hbook



99/02/08 12.36

L1SIMU (with Field Map)

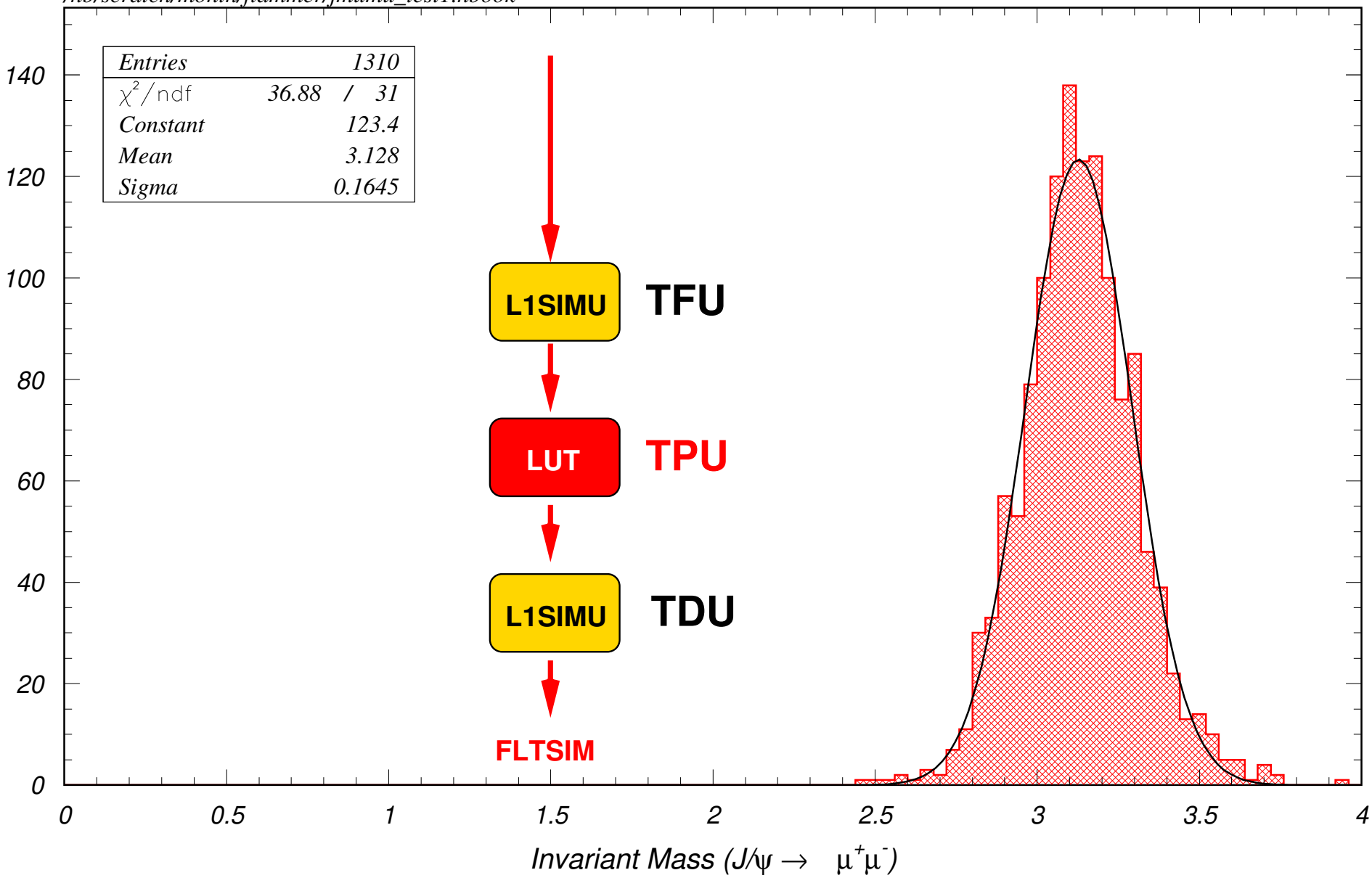
/hb/scratch/month/flammer/jmumu_test1.hbook



99/02/08 12.36

FLTSIM (with Field Map)

/hb/scratch/month/flammer/jmumu_test1.hbook



Total Efficiency without cut

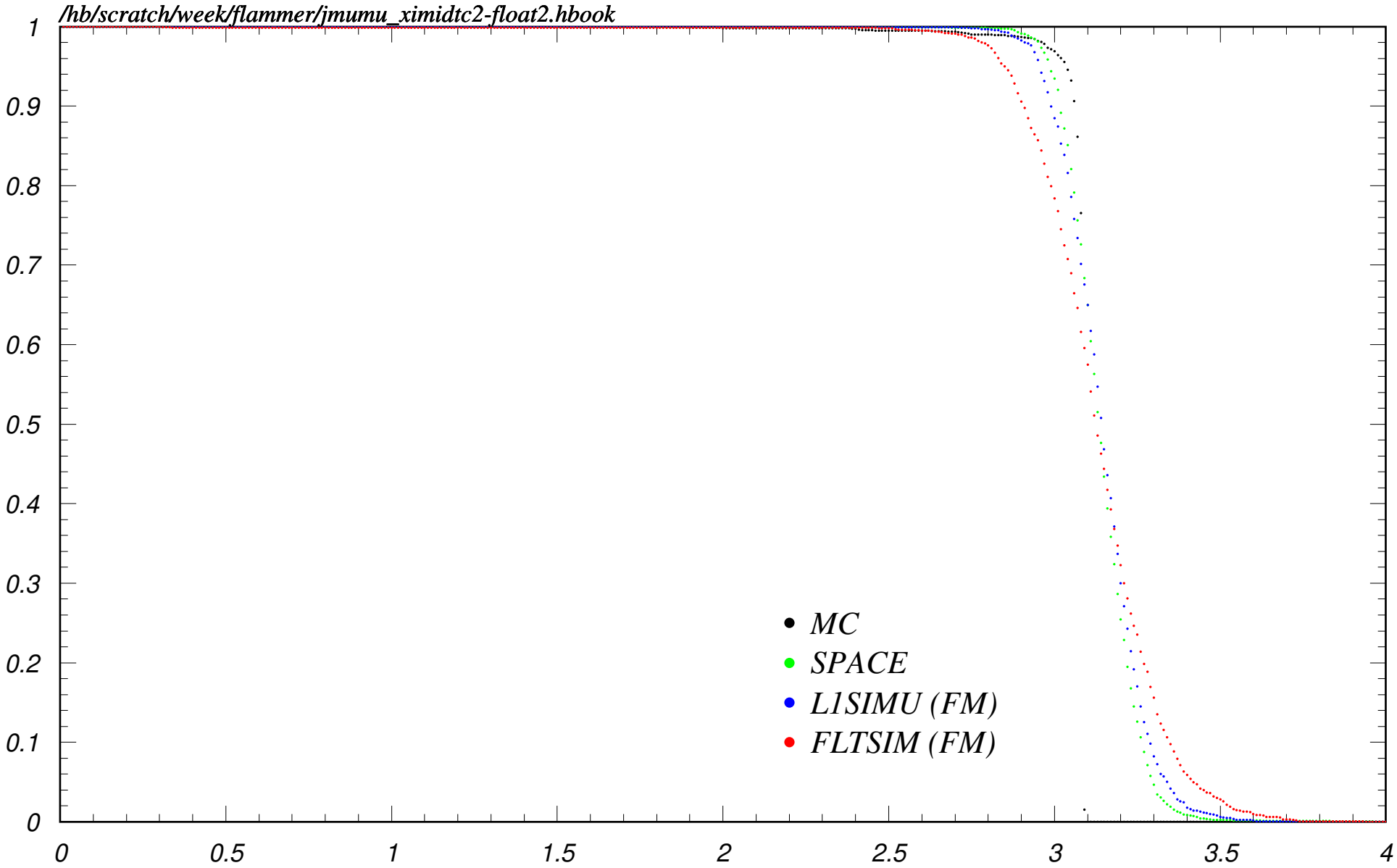
	reconstructed		Total
	1 Particle	2 Particles	Efficiency
MC	0	3000	100 %
SPACE	518	2073	69.10 %
L1SIMU	1149	1310	43.66 %
FLTSIM	1149	1310	43.66 %

- Space represents geometrical acceptance
- Large number of tracks lost by FLT algorithm
- LUT do not contribute to further loss of tracks

→ further study to be done for lost tracks

99/02/18 13.13

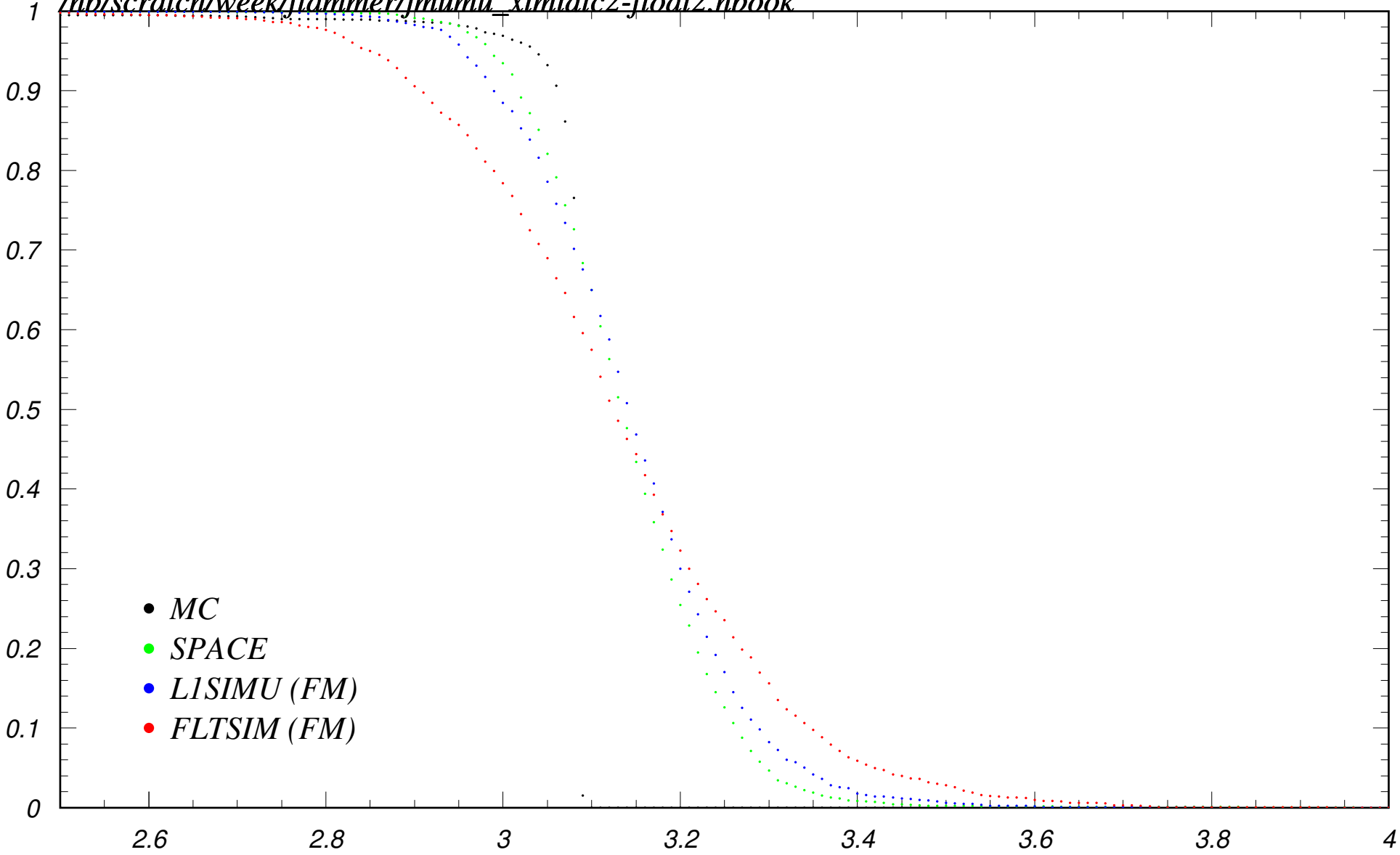
Efficiency



99/02/18 13.13

Efficiency

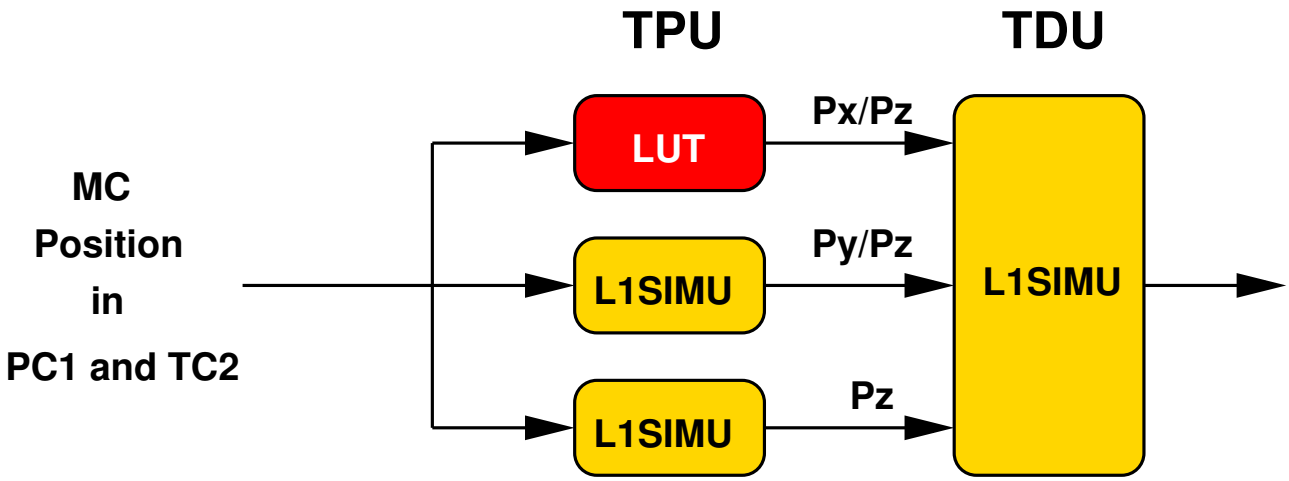
/hb/scratch/week/flammer/jmumu_ximidtc2-float2.hbook



FURTHER STUDIES

- Influence of Px/Pz
  PY/Pz
  Pz
  ? on mass width

→ Identify major component



- Minimum Bias events:
  - 50.000 Events on tape
  - Efficiency for different cuts

Summary

- TPU Lookup tables corrected and optimized
- evt. further optimization possible
- TPU Algorithm is working well

Lots of work to be done

- Study of minimum bias events
- Influence of Px/Pz, Py/Pz, Pz
- Fieldmap improvements
- Problem of lost tracks