

PRS meeting  
CERN 2001/3/27



## ORCA 4 & cmsim121: Problems and first results

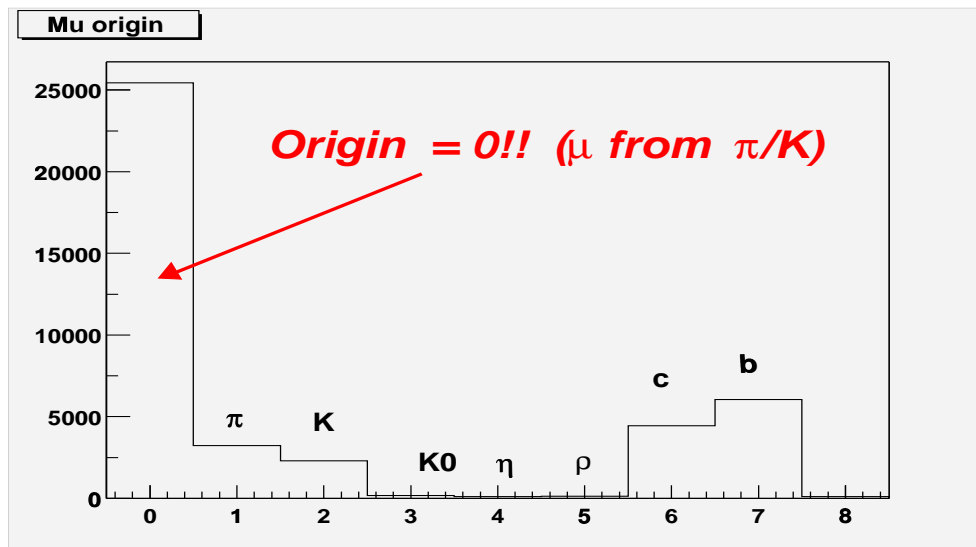
Stefano Lacaprara, *INFN, Padova*.

### Problems

- For production status see Ugo report (next);
- In short: most of the Digi are ready, **but**:
- Frequent crashes on L2 muon analyzer – standard ntuple maker – (each  $\sim 500$  events) when accessing DIGI for calorimetry and/or RPC: digi seems corrupted (strange base for CellId (calo) and Chamber/Strip ID for RPC);
- problem are somehow similar, maybe they are related?
- under heavy investigation with the help of Vincenzo (and Marcin, David...): highest priority, no smart idea so far;
- Federation not yet published for this problem;

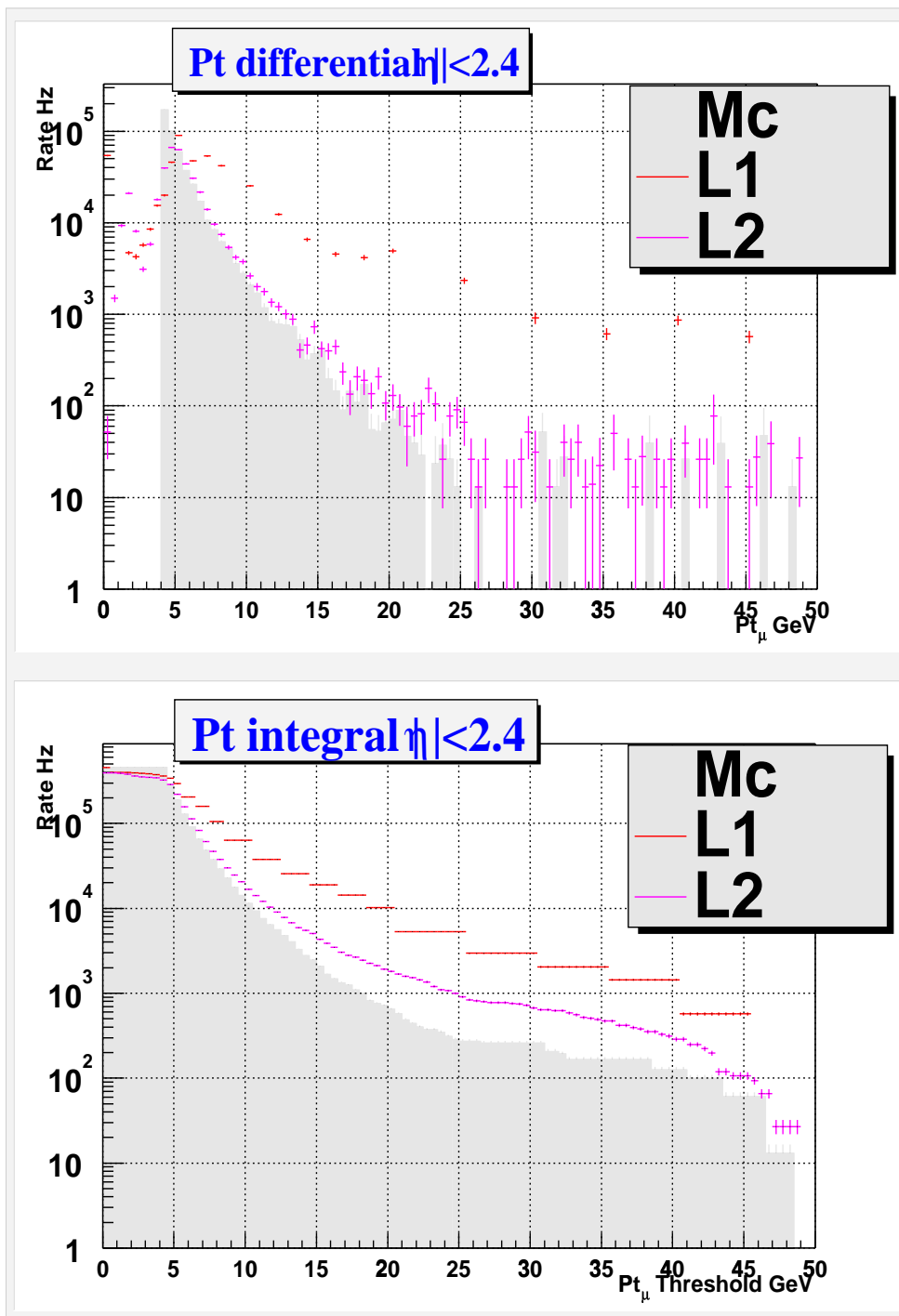
# First result

- Sample: MB 1  $mu, p_t > 4\text{GeV}$  produced in Padova;
- Produced ntuple for  $\sim 33\text{Kev}$ , in bunch of 100 ev for ntupla (!);
- Root tree soon available (I will notify by mail the location);



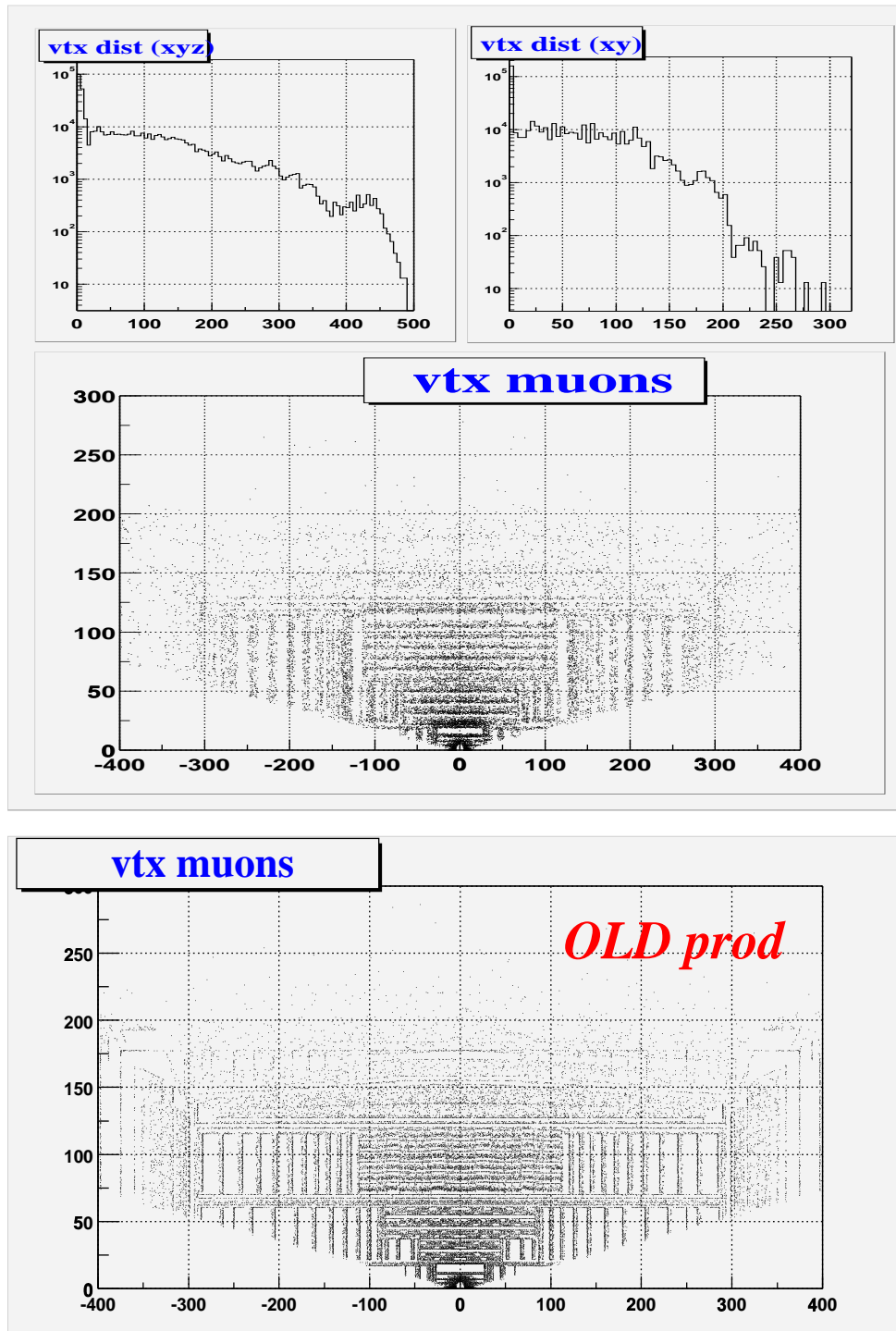
**Still problem for mu parent!:** the patch for muon history is inside ORCA 441, not in 440! We forget to apply the patch in our code, will be ok for next production round

# Rate and L1, L2 reduction



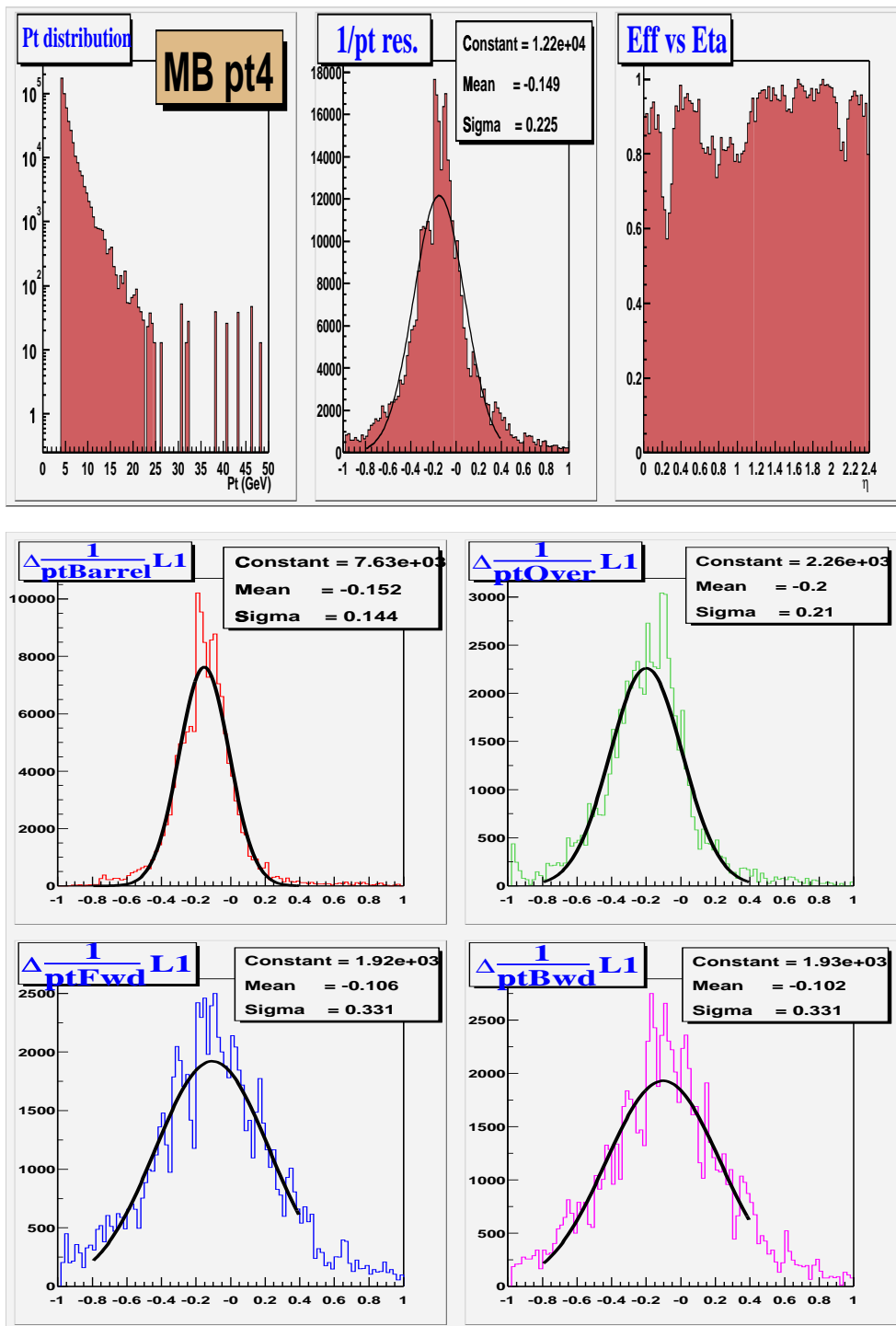
Compatible with old production

# $\mu$ vertex distribution:

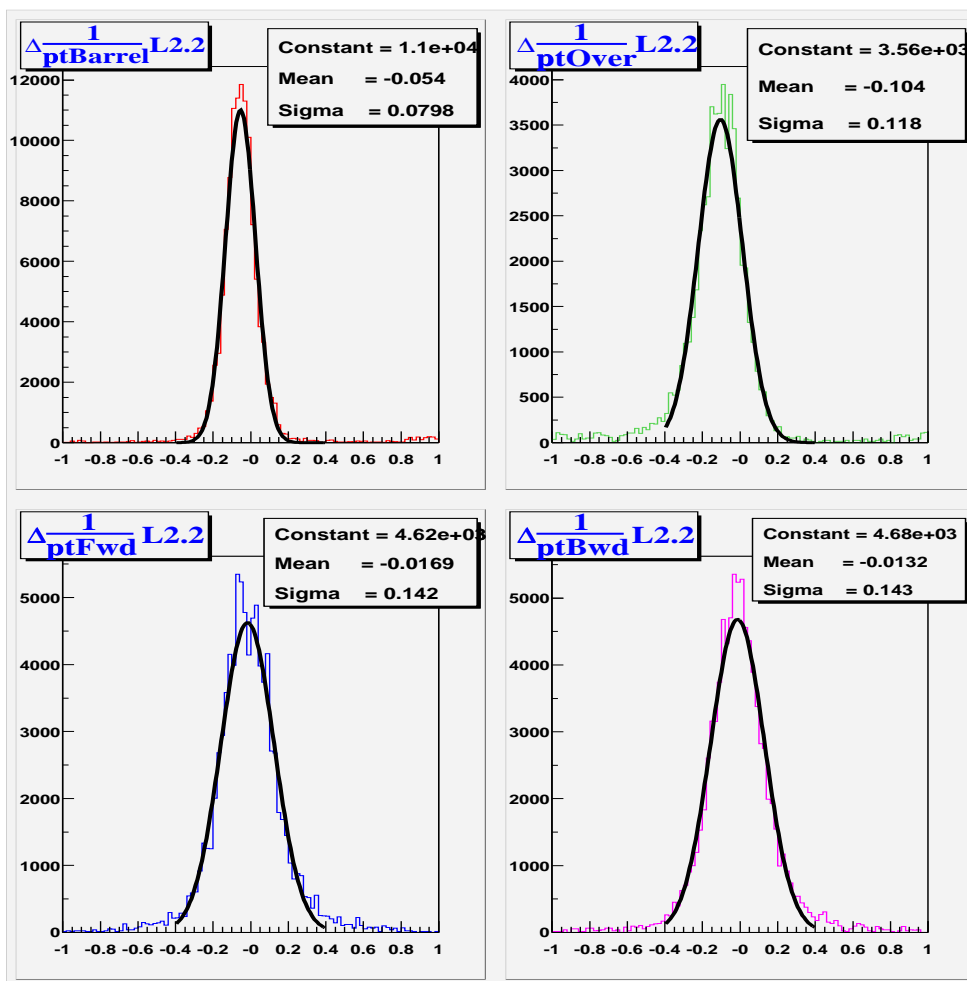
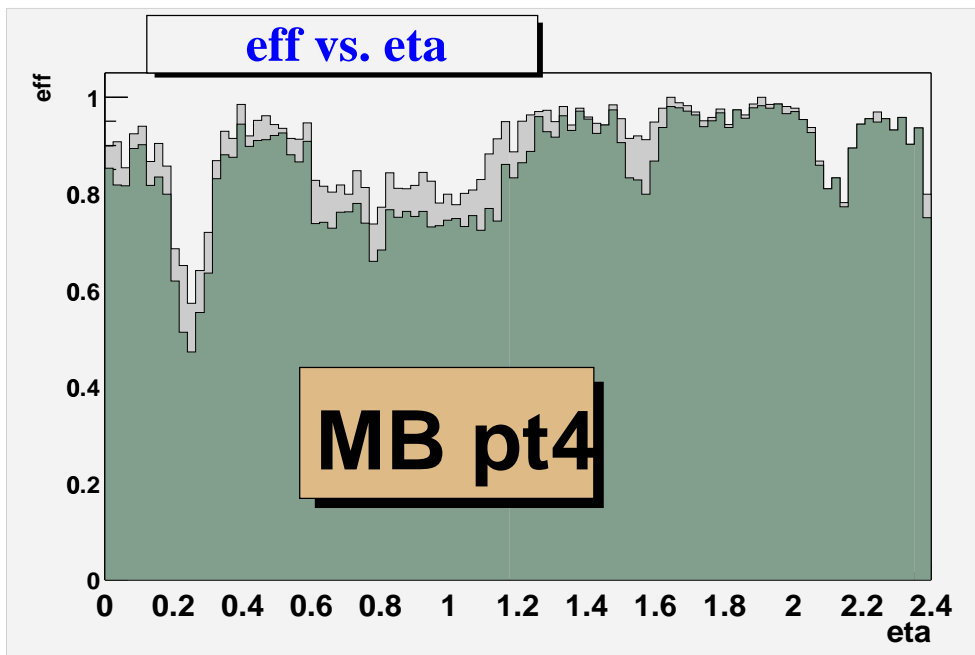


Better but not uniform yet!

# L1 result:



# L2 result:



## Pile Up:

- Events produced with  $-5 \div +3$  bx's for Calorimetry,  $-6 \div +6$  for CSC, in time only for DT and RPC;
- **but:** detector PU range cannot be larger than the general one (as set in the .orcarc), so PU range is  $-5 \div +3$  also for CSC;

## Conclusion:

- Major problem in accessing DB: must be solved to use this production!
- Muon history not correct for non-prompt muon, will be ok for the next dataset;
- PU range not fully correct;
- First partial root tree available;