ERT LL1: Algorithms

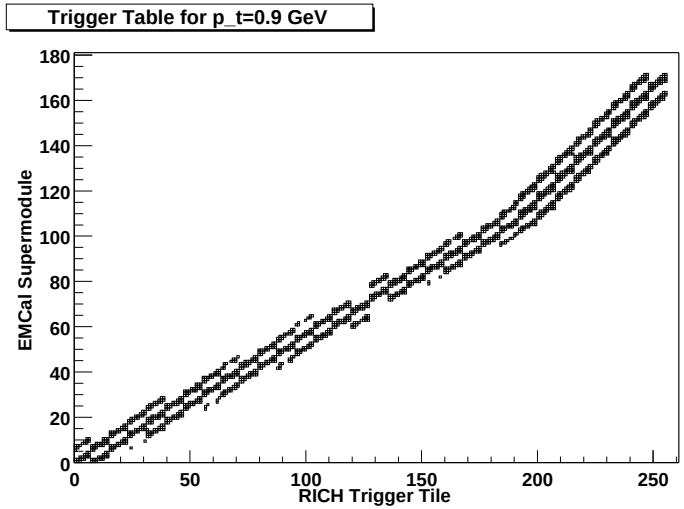
Using information from RICH and EMC:

RICH: 4×5 non overlapping, 3 photoelectrons
EMC: Energy Sums 2×2 (non overlapping)
4×4 (overlapping, three thresholds A,B and C)

π^0, γ	EMC	4×4 A, A∩B or A∪B ,C
Φ	RICH	$N \geq N_{thrs.}$
$h^{\pm}$	EMC	$N \geq N_{thrs.}$ 2×2
e	EMC $\otimes$ RICH	2×2, A, A∩B or A∪B

EMC $\otimes$ RICH:

- Generating LUT from Monte Carlo
- Needs to be tested



ERT LL1: Status and Tasks

1. Building/Testing of ERT LL1 boards

- This will be done in Ames (1 board with 16 fibers is at BNL)
- Populating the boards will start end of August

2. Integration of ERT LL1 boards

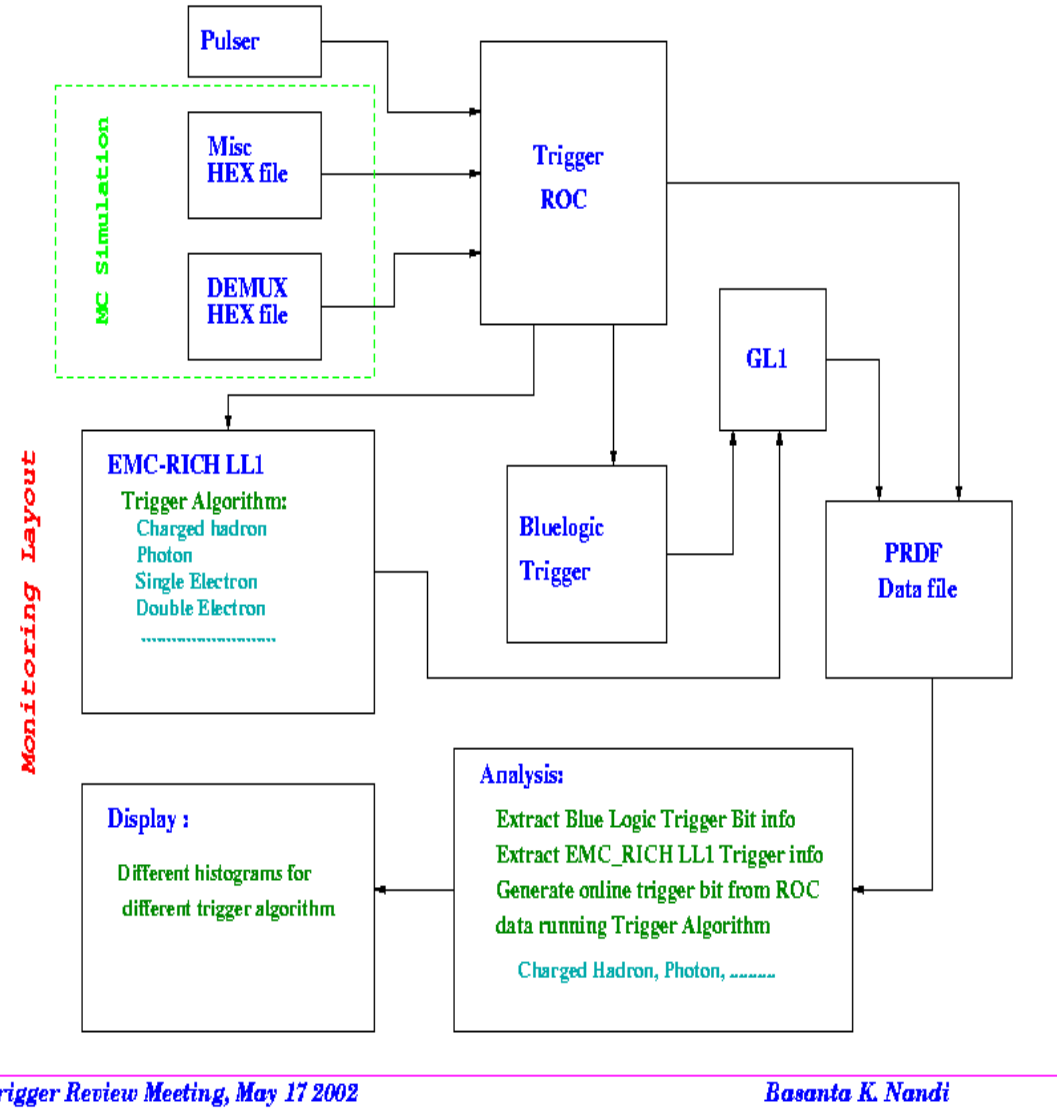
- VME interface is working
- Implementing read out of fibers is in progress/needs to be tested
- Chain test: Read out of Trigger ROC's through LL1 and latching data into the GL-1 data stream

3. Implementing Algorithms

- Testing with some very simple algorithms
- Coding Algorithms, preparing LUT
- Simulation of algorithms/Testing algorithms via VME

4. Testing Algorithms/Monitoring

- Fire Trigger ROC's to produce trigger patterns
- Comparison with Blue Logic

Testing ERT LL1

- Start with simple algorithm
- Testing algorithm with simulation
- Testing algorithm via VME
- Fire ROC's to test algorithm + trigger hardware
- Blue Logic Trigger can be used as a monitor
- Online-Reconstruction of J/Ψ as a monitor ?