Conversion of Trigger Simulation to OO

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Main points:

" Work has begun on design. Lots more to do.
" ATLAS framework is not ready yet, however L1 sim will be fairly independent. Worth starting now.

Requirements: CRITICAL

The System Shall ...

- " Allow easy changing of menus/thresholds etc.
- " Work with fast/GEANT simulations
- " Output correct set of trigger bits to CTP (formatted as realistically as possible)
- " Output ROIs to level 2
- " Output all intermediate data which will be available from the final system

Requirements: USEFUL

The System Shall ...

- Allow thresholds and algorithms to vary with coordinate/circumstances
- Make it easy to change algorithm code
- Fully simulate BCID system if pulse history available, or make reasonable approx. if not
- Include extra information in ROI objects passed up
  - Pointer to tracks leading to ROI
  - Et

(Rough) diagram of EM/Tau
trigger arrangement

EVENT

CALO CELLS

TRIGGER
TOWERS

Could possibly be filled by
ATLFAST at first?

ROI
CANDIDATE

ROI candidate applies
relevant algorithm to itself
to generate ...

Subset of ROIs
with thresh. Bits
set

Em/Tau
Trigger