

# Calorimeter trigger offline simulation

# **Edward Moyse**

(born 17/12/1975! and drinks lager incidentally)

e.moyse@qmul.ac.uk

- <sup>†</sup> Update on progress
- "What's missing?
- **Summary**

# Progress(1):

#### **Documentation:**

I've made some minor changes to the webpage for release 5.0.0

### **Overall**:

Made several changes to fix problems caused by Thomas reorganising his code.

#### **ROD**:

**Finished** 

Now reads Jet Rols and produces JEP Slink objects
Adds EnergyRols to JEPSlink objects (EnergyCTP objects
produced by EnergyTrigger)

# Progress:

## **Em/Tau Simulation:**

Finished!!!!

## **Em/Tau Simulation:**

Finished!!!!

# **Energy Simulation:**

Finished\*!!!!

(\*No FwdJet trigger, but very easy to add ... just need to complete summing algorithm).

# Missing Functionality:

### No coordinate dependent threshold

However TrigT1Calo is designed to support them, and implementation shouldn't be too hard.

## No FWD Jet Trigger / Jet $E_{T}$

Again, implentation should be pretty easy but I don't understand how the FCAL is summed into Jet Elements.

Jet  $E_T$  – this is mentioned in e.g. Norman's Compendium, but not explained in module specifications.

#### No noise/BCID etc.

Beyond scope of my simulation

# And finally...

### Todo:

Do some tidying up of code.

Continue validation.

Check for memory leaks etc. (using valgrind, if I find a computer powerful enough to run it).

I'm now concentrating on writing up, but I'll keep maintaining code/web pages etc. and also try and tidy up the code.

## **Summary**

I'm running some final tests and then I intend to tag release 01-00-00 of TrigT1Calo.

I consider it complete enough, and I don't think there's anything vitally important missing.

It works in release 5.0.0 and I don't intend to support later releases (or at least, I'll only make trivial changes from now on).