

**12GeV Trigger Workshop**  
**Christopher Newport University, Newport News, VA**

**Wednesday 8 July, 2009**

**Registration Link:**

[http://www.jlab.org/Hall-D/meetings/online\\_workshop2009/Registration/Register.php](http://www.jlab.org/Hall-D/meetings/online_workshop2009/Registration/Register.php)

For conference call participation:

- 1) Dial toll free 1-800-377-8846 (From Canada dial 1-888-276-7715)
- 2) Enter the participant passcode, 29917863 followed by the # sign

**Session I: 0900 --> 10:45**

Welcome and Overview -Chris Cuevas

-- Goals for the workshop

1. Review and discuss present requirements for the trigger systems of Hall D and Hall B, Hall C and Hall A.
2. Clearly identify new requirements for trigger system modules that have not been designed. Review recent success of two crate trigger module test station.
3. List requirements for "Global" trigger system:

Topics:

Flash ADC -- Review list of specifications and measured performance

Flash ADC Revision 1 --

Crate Trigger Processor

Signal Distribution (Clock, Trigger, Sync)

Trigger Interface

**Coffee Break: 10:45 --> 11:00**

**Session II: 11:00 --> 12:45**

DAQ System - Session 'leaders' David Abbott, Ed Jastrzembski

Topics:

System configuration issues

Data readout issues.

    Event blocking

    2eSST

Trigger supervisor -- Review planned capabilities

Managing pipelined triggers and various trigger types

Concurrent operation of multiple trigger 'sessions'

**Lunch 12:45 --> 14:00**

**Session III: 14:00 --> 15:45**

Global Trigger - Session 'leader' Alex Somov

Topics:

- Review Physics motivation, requirements

- Will the hardware be capable of handling the trigger equations?
- Discuss trigger commissioning criteria
- Validation of new trigger equations. Who and how does one configure a 'trigger equation' for experiment operations.
- High level trigger algorithms in Sub-System Processor (SSP) and/or Global Trigger Processor (GTP)

**Coffee break: 15:45 --> 16:00**

**Session IV:-16:00 --> 17:30**

On-line and run control – Session 'leader' Elliott Wolin

Topics:

-- Scaler requirements:

    What signals need to be counted?.

    How often is a scaler event read out?

- Calibration triggers

- Cosmic ray triggers

-- Implementation plan for commissioning tests

    Trigger 'menu' (GUI) development.

    How do we plan to modify a trigger from Run-Control?

    On-Line trigger performance: Efficiency plots; What other trigger analysis is needed to validate the trigger effectiveness during an experiment?

-- Ajourn

**Dinner**

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