Test Beam Activities

Introduction:

Two test beam periods are scheduled in 2009 at CERN: May and October. These tests are crucial in view of validating the sensor for the IBL, but also for the SLHC tracker upgrade.

ATLAS TestBeam periods in 2009

- 10-17 Oct. in H6 with the EUDET telescope
- 24-04 Nov. in H8 (depending on if we can switch with ALFA) with the BAT and Morpurgo magnet
- 20-25 Nov. in H6 with the BAT (preliminary)

Official documents: Periods and Calendar

See todo list

The test beam setup is based on two main components:
- Silicon telescope (so called "Bonn" telescope or BAT) with its own DAQ and monitoring. Have integrated the TurboDAQ system.
- 3D assemblies read out by TurboDAQ (1 TurboDAQ per tested board). We shall have at least 3 TurboDAQ available, plus one in the lab (building 161).

Some notes from January 2009 meeting at SLAC:January 2009 meeting notes

CERN Test Beam Area

Some pictures of the building, beam line, cooling box, magnet, etc. can be found here.

Test beam pictures

Picture can be found in the shared documents (protected, contact page author to get these pictures)here and here.

Test Beam Analysis Information:

- Conference proceeding of 2006 Test Beam from Ole: NSS-3D-record.pdf
- February 2009 Analysis Tutorial from Havard
- TestBeam 2008 analysis presentation Havard, Sept 2008: Havard_Sept2008
- TestBeam 2006 analysis presentation Markus, Sept 2008: Markus_Sept08_tb2006
- IEEE 2008 Proceedings from Markus: arXiv:0806

2009 Test Beam:

- June 10th Software Meeting: agenda
- June 04th Software Meeting: agenda
- April 29th Software meeting agenda
- April 2nd Software meeting agenda
- First version (April 2nd) of Data Quality Monitoring file: run9430-9490-DataQuality-id164.pdf

Bonn Analysis Telescope Information

- Manual (Thesis) BAT documentation.pdf
- NIM paper ATLAS Beam Telescope-NIM 2002.pdf

EUDET Telescope Information

- Project web page: EUDET
- Installing the EUDAQ framework

MCC controller board

Description of a MCC controlled board to read out multiple single chips.

- http://www.ge.infn.it/ATLAS/Electronics/home_frames/PixTelescope_frame.html
- Some introductory information can also be found here:http://www.slac.stanford.edu/~phansson/files/phansson_slac_group_meeting_140809.pdf
- MCC boards at SLAC.