

SEMINARS SEMINAIRES

Pour de plus amples informations, prière de consulter
For full information on these seminars, please see
<http://wwwas.cern.ch/Bulletin/Seminars/current.html>

Monday 16 December

TECHNICAL SEMINAR

at 11.00 hrs – ECP-Conference Room, bldg 13/2-005

Report on the Second Workshop on Electronics for LHC Experiments
(Balaton, Hungary, 23-27 September 1996)

by François BOURGEOIS / CERN-ECP

The seminar will give an overview of the content and the outcome of this Workshop organised by RMKI, Budapest on behalf of the LHC Electronics Review Board.

The Workshop gathered 150 physicists and engineers from 20 countries including USA and Japan. Calorimetry, trigger and event building, muon, opto-electronics, radiation-hardness and electronics for tracking issues in LHC experiments were presented in sessions followed by panel discussions. A large number of subjects were covered and they gave rise to fruitful discussions.

Tuesday 17 December

TECHNICAL SEMINAR

at 11.00 hrs – bldg 14/4-030

Principles and methods for in situ degradation monitoring to predict reliability of selectronic components

by Luc TIELEMANS / Destin N.V.

The reliability of components and circuits are normally verified by performing endurance tests. The result of these tests is whether these components withstand the test or not. No information is obtained to determine life time nor to improve reliability. It is impossible to distinguish between suppliers when both withstand these tests.

All standard reliability tests are based on the cumulative failure curve, a statistical method. An alternative way is degradation kinetics, a deterministic method. In this seminar it will be demonstrated that a reliability system can be built on degradation kinetics, which overcomes all difficulties of the standard test methods.

Tuesday 17 December*

SL SEMINAR

at 16.00 hrs** – SL Auditorium, Prévessin, bldg. 864

The consequences of LHC civil engineering for the SPS and LEP

by John POOLE / CERN

The schedule for the construction of LHC requires that civil engineering work starts during the final period of LEP operation (when it should be at its highest performance) and whilst the SPS provides beams for LEP, fixed target physics and test beams for LHC. It is therefore essential that the LHC civil engineering work does not affect the performance of the LEP and SPS machines.

The excavation of shafts and caverns for the Atlas and CMS experiments are predicted to cause movements over lengths of 60-80m of the LEP and SPS tunnels as well as the LEP electron injection line. Both the horizontal and vertical

movements are estimated to have sufficiently large amplitudes to prevent operation of the machines and ultimately break vacuum elements if no precautions are taken. The details of the movements, their effects on the equipment and the proposed precautions will be described.

* Please note unusual date !

** Coffee and tea will be served at 15.30 hrs in front of the auditorium

Wednesday 18 December

CONFERENCE ON CCD SENSORS AND A/D CONVERTERS

10.00 to 12.30. hrs – Salle de conférence, bât. 2/1-034

J. GRZYMEK / THOMSON-TCS

Presentation of the latest ADC and CCD products and about the future/trend of ADC and CCD imaging at TCS

Presentation of Image sensor (45 minutes)

overview of TCS visible and near infrared image sensors, latest high speed/high resolution linescan and area array CCDs, near infrared image sensors, new digital camera kits for professional applications, trends and information concerning TCS's strategy in the field of digital imaging.

Presentation of ADC converter (45 minutes)

TCS strategy for ADC, Bipolar technologies, Hardened aspects, Low power ADC: 8/10/12bit 50Msps, High speed ADC: 8bit/1Gsps and higher, Specific functions and packaging

Language : English

Information : L. Abel / FI-A / 79561

Wednesday 18 December

COMPUTING SEMINAR

at 16.00 hrs – CN Auditorium, bldg. 31/3-005

Prospects for Internet Technology

by B. CARPENTER / CERN-CN

This talk surveys the current developments in Internet technology, with a particular emphasis on the need for guaranteed quality of service. It discusses hardware technologies for increased bandwidth, mechanisms for requesting and providing specific qualities of service, and various scaling issues. Finally it discusses mechanisms needed for the Internet in the mass market.

Organiser : G.Folger / CN