

qui a dû être mené par le Groupe Génie civil de la Division ST, qui s'était adjoint le concours d'un bureau d'architectes genevois en tant que maître d'œuvre.

Le résultat est à la mesure des objectifs puisque 1.800 m² de bureaux et labos et plus de 400 m² de locaux techniques y sont désormais partagés entre les Divisions PPE, AS et ST. Le financement de cette opération de réhabilitation a été en grande partie couvert par un don de la Confédération Helvétique.

SEMINARS SEMINAIRES

Monday 30 August

PPE SEMINAR

at 16.30 hrs – Auditorium

Recent results from the Crystal Barrel

by N.P. HESSEY / CERN

The Crystal Barrel experiment uses low energy antiproton-nucleon annihilation to study the strong interaction in the non-perturbative region. The main goals are understanding the $q\bar{q}$ meson spectrum in the 1 - 2 GeV mass range, finding non- $q\bar{q}$ mesons (glueballs, hybrids, $K\bar{K}$ molecules), and probing $\bar{p}N$ annihilation dynamics. We will report recent results, especially in the $J^P = 0^+$ meson sector; also in eta decays which give a test of chiral perturbation theory; and radiative decays which test the vector meson dominance model. Preliminary pictures from in-flight annihilations will be shown, followed by a summary of future plans for the experiment.

Tuesday 31 August

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium*

A Summary of the Marseille EPS Conference

Part 2 : Results from e^+e^- machines

by Jorg WOTSCHACK / CERN-PPE

* Tea & coffee will be served at 16.00 hrs.

Wednesday 1 September

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Universal correlations in energy spectra of chaotic systems : the energy level as a fermion

by Boris ALTSHULER / MIT

We consider a quantum chaotic system whose Hamiltonian depends on some parameter. A good example is a hydrogen atom in the external magnetic field. It is possible to show that the statistical properties of the energy levels as functions of the parameter after appropriate rescaling become universal. Some of the correlation functions, such as the correlation

acting as works supervisor, has not only had to deal with the usual technical problems encountered in construction, but has also had to liaise with other services and anticipate and adjust to changing requirements.

With 1800 m² of office and laboratory space and over 400 m² of technical premises which will be shared by the PPE, AS and ST Divisions, the objectives have been met. This renovation project has been largely financed by a gift from the Swiss Confederation.

function of the densities of states, can be evaluated exactly using the sigma-model approach. It turns out that this correlation function is equal to the pair correlation function of one-dimensional fermions, whose interaction is inversely proportional to the square distance. The relation to matrix models which are discussed in connection with quantum gravity will also be discussed.

Wednesday 1 September

TECHNICAL PRESENTATION

14.30–16.00 hrs – Council Chamber

The NEWTON MessagePad, the first in a family of communication assistants from Apple

by G. DOLF / Industrade AG (CH)

By combining Newton Intelligence technology with sophisticated communication capabilities, the Newton MessagePad helps you to stay in touch with friends and colleagues, organize your life, and keep track of your ideas. You can take notes. Make a quick sketch. Format and print letters. Share and synchronize information with your personal computer. Send a fax. Receive pages and messages. Tap on-line services or electronic mail... As easy to use as pencil and paper, the NewtonPad lets you leave your notes handwritten or reads your handwriting and transforms it into typed text.

Language : English

Information : M. Diraison / FI / 4585

Thursday 2 September

DETECTOR R & D COMMITTEE

Open session

Thursday 2 September

at 09.00 hrs – Auditorium

1. *Introductory remarks (W. Hoogland, M. Turala)*
2. *RD-8 Status Report: Development of GaAs detectors for physics at the LHC (RWTH Aachen–Bologna–CERN–Florence–Albert Ludwigs Univ. Freiburg–Glasgow–Lancaster–RAL–Sheffield–ANSTO Sydney; DRDC 93-37; C. del Papa).*

3. RD-18 Status Report: A study of new fast and radiation hard scintillators for calorimetry at LHC (CALTECH-CERN-DAPNIA Saclay-INFN Ancona-INFN Roma-IFA Bucharest-IP Praha-IPNL & LPCML Univ. Claude Bernard Lyon-LAPP Annecy-LLNL Livermore-Lund-Petersburg Nuclear Phys. Inst. St. Petersburg-RWTH Aachen-Tata Inst. Bombay; DRDC 93-31; P. Lecoq).
4. RD-20 Status Report: Development of high resolution Si strip detectors for experiments at high luminosity at the LHC (Comenius Univ. Bratislava-Cambridge-CERN-INP & INPT Cracow-NCSR Demokritos Athens-SEFT Helsinki-Liverpool-Brunel London-Imperial College London-CPPM Marseille-Oslo-SI Oslo-INFN Padova-INFN Rome Sanita-RAL-LEPSI Strasbourg-INFN Turin-Uppsala-IHEP Vienna-PSI Villigen-Yale; DRDC 93-30; G. Hall).
5. RD-23 Status Report: Optoelectronic analogue signal transfer for LHC detectors (Birmingham-CERN-Ecole Polytech. Fed. Lausanne-Imperial College London-Lund-Oxford-RAL-Marconi Defence Systems Stanmore; DRDC 93-35; G. Stefanini).
6. RD-26 Status Report: Development of a large area advanced fast RICH detector for particle identification at the LHC operated with heavy ions (Bari INFN & Politecnico-CERN-LIP Coimbra-Ecole Polytechnique Palaiseau-EPF Lausanne-Giessen-Lund-Munich TU-Padova-Weizmann Inst. Rehovot-Rudjer Boskovic Inst. Zagreb; DRDC 93-36; F. Piuz).
7. RD-27 Status Report: First-level trigger systems for LHC experiments (Birmingham-CERN-Heidelberg-Linköping-MPI Munich-Queen Mary & Westfield College London-Royal Holloway & Bedford New College London-La Sapienza Rome-RAL-Stockholm; DRDC 93-32; N. Ellis).
8. RD-28 Status Report: Development of micro-strip gas chambers for radiation detection and tracking at high rates (CERN-BINP Novosibirsk-CERN Strasbourg-CRPP Ottawa-DAPNIA Saclay-Torino-FPNT Cracow-IIHE, ULB-VUB Bruxelles-INP IME, NCSR Demokritos-IP Prague-IP Bratislava-IP Kosice-IPNL Lyon-ISA Aarhus-ITEP Moscow-JINR Dubna-LIP Coimbra-Frascati-Legnaro-Gran Sasso-LPI Moscow-LPPE Mons-MPI Heidelberg-NIKHEF-NPI Moscow-Carleton Univ. Ottawa-Birmingham-Liverpool-Manchester-Univ. Luis Pasteur Strasbourg-RAL-Texas A&M Univ.-TRIUMF-UC London-Weizmann Inst. Rehovot; DRDC 93-34; F. Sauli).
9. Proposal: Shashlik calorimetry. A combined shashlik + preshower detector for LHC (Ecole Poly. Palaiseau-CERN-JINR Dubna-ITEP, Russia-IHEP Protvino-INR Moscow-LIP Lisboa-Imperial College London-RAL-Brunel Uxbridge; DRDC 93-28/P50; L. Dobrzynski).

Closed session

Thursday 2 September
following the Open Session, continuing on
Friday 3 September
at 09.00 hrs, 6th floor Conference Room

Friday 3 September

PRESENTATION

at 10.00 hrs – CN Auditorium
bldg 31/3-005

Practical aspects of VMS clustering

by Jim KRIEGER / VMS cluster engineering,
Digital USA

Clustering of VMS machines (VAX and AlphaAXP) is probably the best way of integrating distributed or localised computers, giving easy management and high availability. This presentation will have two main parts :

- An overview of the futures of VMS clustering technology, including how distributed disk shadowing will evolve.
- A guide to troubleshooting VMS clusters.

Information: Tor Bothner / 7095 / beep 5555 /
bothner@dxcern

Friday 3 September

MEETING ON PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room

Correlators, condensates and QCD sum rules at finite temperatures

by Vladimir ELETISKY / University of Bern

Current correlators in QCD at a finite temperature T are considered from the viewpoint of the operator product expansion (OPE) and the extension of QCD sum rules to finite T is discussed. It is shown that in order T^2 a thermal correlator is given by a mixture of $T = 0$ correlators with different parity and isospin, implying that to this order hadron masses are T -independent. This is checked using the OPE, by considering the T -dependence of condensates. It is shown that in the QCD sum rule approach this dependence in order T^2 affects only the residues of resonances. A thermal shift of masses appears in the order T^4 . It is contributed also by condensates of operators with non-zero Lorentz spin which were absent at $T = 0$. T -dependence of such a condensate, $\langle E^2 + B^2 \rangle$, is obtained.

Monday 6 September

PRESENTATION

at 10.00 hrs – Council Chamber

The use of GENESIA in Power Engineering and Distribution Systems

by Archie TAYLOR

Today there are available a wide range of data-acquisition systems and software tools. The application of AI tools and Languages have also been applied to effectively support the Power Engineering and Electrical Distribution industry, however, there are still a number of fundamental limitations and problems that have not been overcome to deliver the responsive operational load-flow management and engineering support requirements that need to be satisfied. From the developments we are currently undertaking we will highlight how the reliable and innovative application of