

En ce qui concerne les autres catégories d'actifs, le portefeuille immobilier a eu une performance d'environ 6 % par rapport à la valeur des biens en fin d'année, alors que le rapport de la créance sur le CERN a été de 4 %. Quant au taux de rendement des liquidités, il a été de 3 %. Ainsi, l'immobilier, la créance et les liquidités ont contribué de manière significative à réduire la performance eu égard au fait que ces trois postes représentaient plus de 1400 MCHF.

Conclusions

Ces graphiques et ces données sont tirés du rapport annuel 1997 de la Caisse de pensions (CERN/2239-CERN/FC/4060), disponible dans les secrétariats de division pour les membres ou auprès de l'Administration de la Caisse (tél. 767 91 94) pour les bénéficiaires. Le rapport annuel contient des informations détaillées sur toutes les facettes de l'activité de la Caisse, que ce soit en matière de placements mobiliers ou immobiliers ou en matière d'évolution de la situation des membres et bénéficiaires ou encore sur les principaux sujets traités et sur le travail effectué par les organes de la Caisse. Si les questions touchant votre caisse de pensions vous intéressent, nous vous engageons vivement à lire le rapport annuel et à participer à l'Assemblée générale annuelle dont l'ordre du jour figure ci-dessus.

The English version will be published next week.

SEMINARS SEMINAIRES

Monday 28 September

DETECTOR SEMINAR

at 11.00 hrs – Conference room, bldg. 13/2-005

Progress with GEM and other topics

by F. SAULI / CERN-EP

Progress in manufacturing and understanding of the operating properties of the Gas Electron Multiplier (GEM) will be described. In non-flammable gases, gains above 10,000 have been demonstrated for a single device, and above 100,000 for a double GEM in cascade; signals are read-out on simple stripped printed circuits. Extensive laboratory and beam tests demonstrate the excellent rate capability, efficiency, accuracy, time resolution of GEM devices. With a special pick-up electrode, GEM detectors permit 2-D localisation, with both co-ordinates read-out at ground potential. In systematic studies of micro-pattern structures, exposed to high rates and heavily ionising tracks, we verify the appearance of discharges when approaching the Raether limit for the avalanche size, and confirm that more than one order of magnitude larger gains can be achieved in cascaded devices.

Information:

<http://www.cern.ch/CERN/Divisions/EP/Seminars/Welcome.html>

Organiser: Rui Ribeiro / CERN-EP

Tuesday 29 September

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium, bldg. 500*

Highlights of the Vancouver Conference

by Friedrich DYDAK / CERN-EP

ICHEP'98, the International Conference on High Energy Physics held in July in Vancouver, can in several ways be

Vous pouvez aussi consulter

For information on these seminars, please see

<http://wwwas.cern.ch/Bulletin/Seminars/current.html>

regarded as a milestone for particle physics. The talk will attempt an appreciation of the recent developments, also for non-experts.

Organiser: Jasper Kirkby / CERN-EP

* Tea & coffee will be served at 16.00 hrs.

Mercredi 30 septembre

PRÉSENTATION TECHNIQUE

09.00-16.00 h – bât. 40/2-A01

Composants électroniques

par A. GREMAUD & S. COLLET / AWAG AG (CH)

Les composants électroniques EMC, CEM sont d'actualité, AWAG ELECTROTECHNIK représente les fabricant SCHLEGEL et KITAGAWA, dont les produits sont destinés aux protections EMC, CEM. Les composants ferrites et spéciaux, en gaines métalliques permettent de résoudre les problèmes spécifiques à ce domaine.

La Société distribue également les produits de KRAUS + NAIMER, des interrupteurs de puissance, et DOLD relais et systèmes de sécurité pour les moteurs, la gestion des alarmes, etc.

Le nouveau catalogue des composants d'installation électriques et de câblage de la société sera à disposition.

Langues: français, allemand, anglais

Information: S. Shearer / SPL / 76360

Wednesday 30 September

COMPUTING SEMINAR

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

Highlights from CHEP '98 and HEPiX

by G. PAWLITZEK, E. ARDERIU RIBERA &
A. SILVERMAN / CERN-IT

The first two speakers will review the presentations given at this year's Computing in High Energy Physics (CHEP '98) conference, both from a general point of view and in their specific areas of interest.

Thereafter the HEPiX meeting which took place just before CHEP '98 will be summarised by the third speaker.

NOTE: This seminar was originally announced for Wednesday 23 September, but had to be cancelled.

Information: <http://consult.cern.ch/seminars>

Organiser: G.Folger / CERN-IT

Thursday 1 October

DETECTOR SEMINAR

at 11.00 hrs – Conference room, bldg. 13/2-005*

The CLEO III Upgrade

by S. KOPP / Syracuse University

As part of an upgrade planned for 1999, the CLEO experiment at the Cornell symmetric $e^+e^- \rightarrow$ Upsilon(4S) $\rightarrow$ BBbar collider will be installing a barrel Ring Imaging Cherenkov detector. This addition, in addition to upgrades to the accelerator, may allow CLEO to study CP violation in charged B decays. As a result of adding the RICH, the entire Silicon and Drift Chamber inner tracking system must be replaced. The design of each of these detector subsystems will be discussed, as well as their progress toward completion. Emphasis is given to the RICH being built at Syracuse University.

Information:

<http://www.cern.ch/CERN/Divisions/EP/Seminars/Welcome.html>

Organiser: Rui Ribeiro / CERN-EP

* Please note unusual time and place

Thursday 1 October

LHC PROJECT SEMINAR

at 14.15 hrs – SL Auditorium, bldg. 864*

The TOTEM experiment:

Physics motivation and machine optics studies

by M. HAGUENAUER / CERN-EP & A. FAUS-GOLFE /
CERN & University of Valencia

A brief description of the physics goals of elastic and total cross section at the LHC will be given. Emphasis will be put on the possible consequences on the machine. It will be followed by a detailed description of the beam optics in the even and odd LHC crossings.

* Please note change of place!

Thursday 1 October

CERN HEAVY ION FORUM

15.00-17.00 hrs – Conference Room bldg.13, 2-005

1. What can we learn from non-identical particle correlations

by R. LEDNICKI

2. Review of the Event-by-Event analysis workshop in Trento

by S. MROWCZYNSKI

Abstract of presentation 2:

Central collisions of Heavy Ions at the SPS, RHIC and LHC accelerators produce up to several thousands particles in each interaction, making each event an "ensemble" by itself where QCD at extreme conditions of energy density can be studied.

The recent Trento "Event by Event" workshop focused on what type of physics studies can be performed on such systems both theoretically and experimentally. Matter flow, parton dynamics in dense media, correlation measures and their relationship to the dynamics of the system, DCCs and non-equilibrium thermodynamics are some topics discussed that will be reviewed here.

Information: <http://wwwinfo.cern.ch/a/alicedoc/www/chic/>

Organisers: Y. Foka and C. Lourenço

Thursday 1 October

SL SEMINAR

at 16.00 hrs* – SL Auditorium, bldg. 864

The Plasma Wakefield Acceleration Experiment E-157 at SLAC

by Ralph ASSMANN / CERN

As high energy accelerators approach the acceptable limits of size and cost, innovative methods of beam acceleration are being studied with a renewed interest. In 1997 the experiment E-157 has been approved at SLAC in order to study plasma-based wakefield acceleration. The experiment is to be performed in 1999 by a collaboration of LBNL, SLAC, UCLA and USC. Its goal is to demonstrate an accelerating gradient of 1 GeV/m over a 1 m long plasma acceleration unit. A high current SLC bunch is used to both induce wakefields in the plasma and to witness the resulting beam acceleration. Using existing SLAC facilities, the experiment will study high gradient acceleration at the forefront of advanced accelerator research. The seminar will describe the design of the experiment and discuss the expected results. An outlook is given for the possible use of plasma-wakefield acceleration for high energy accelerators.

Information:

<http://www.cern.ch/CERN/Divisions/SL/news/news.html>

Organiser: Werner Herr / CERN-SL

* Tea and coffee will be served at 15.30 in front of the Auditorium

Friday 2 October

MEETING ON PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room, bldg. 4

Leptonic and semileptonic decays of the B meson from lattice QCD

by Sinead RYAN / Fermilab

One of the goals of current and future B-physics experiments is to overconstrain the unitarity triangle of the Standard Model. The determination of many of the CKM matrix elements requires as input B meson decay form factors which can be determined non-perturbatively from lattice QCD.

I will present new results from the Fermilab lattice group for these form factors and a comparison with previous calculations.

Monday 5 October

CERN EP SEMINAR

at 16.30 hrs – Auditorium, bldg. 500*

SUSY searches at DELPHI

by Gustavo WOLF / CERN-EP

I will briefly review DELPHI results for searches within the MSSM framework. I will then concentrate on the description of searches in the Gauge Mediated SUSY Breaking framework, also known as Light Gravitino Scenario (LGS). Finally I will describe what searches are still missing in the LGS.

Organiser : Fabiola Gianotti / CERN-EP

** Tea & coffee will be served at 16.00 hrs.*

Wednesday 7 October

TECHNICAL PRESENTATION

09.30–15.00 hrs – bât. 304/1-001 A

Laser, Optical Measurement and Signal Analysis

by GMP SA Laser & Photonics Div.(CH) representing Coherent (USA), Physik Instrumente (D), Aerotech (USA), CSO (F), Ocean Optics (USA), Hewlett-Packard (USA), Stanford Research Systems (USA), Burleigh (USA), ILX Lightwave (USA), TMC (USA), SDL (USA)

Items on demonstration:

Laser; Solid-state laser system with diagnostic instruments, laser diodes

Spectroscopy; Miniature fibre optic spectrometer.

Micro-positioning; Laser interferometer, motioning systems, micro-mechanical components and vibration isolation laboratory tables.

Signal analysis; 102.4 kHz two channel network analyser, RF dual phase lock-in amplifier

Language: English, French, German

Information: S. Shearer / SPL-PS / 76360

Wednesday 7 October

PS SEMINAR

at 11.00 hrs – PS Auditorium, bldg. 6/2-024

Wake-field laser acceleration at Ecole Polytechnique

by Denis BERNARD / Ecole Polytechnique, Palaiseau

While accelerator physicists are designing new linear lepton colliders, plasma physicists are exploring the route towards another type of linear collider based on laser-plasma interaction. Recent experiments performed at Ecole Polytechnique have demonstrated accelerating gradients in excess of 1 GeV/m using a longitudinal electron plasma excited by a laser pulse. Some of the problems linked to the design of an actual multi-TeV high luminosity collider — say 5 TeV, $10^{35} \text{ cm}^{-2} \text{ s}^{-1}$ — will also be addressed.

Organiser: Brunto AUTIN / CERN-PS

Wednesday 7 October

COMPUTING SEMINAR

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

Web University – Distance learning and working over high speed Internet

by R. RINTA-FILPPULA / CERN-EP

A Web University (WU) is a project based on the concept of a virtual university. The students and staff at the participating sites can communicate over the Asynchronous Transfer Mode (ATM) and Internet network by using applications like email, World Wide Web (WWW), multicast videoconferencing and Video-on-Demand. The international ATM connections, JAMES ATM and TEN-34, have been provided by the European Commission since 1996.

The Web University started as a co-operative pilot project between CERN and Finnish universities. It concentrates on transferring the latest results of high-energy physics directly to universities. Physics researchers can update their knowledge by participating in CERN seminars and experiments from their own workstations over a real time network based on ATM and Internet technology. Teaching is interactive and it is in principle targeting researchers and postgraduate students, but some courses in physics and information technology have been additionally offered to undergraduate students.

Information: <http://consult.cern.ch/seminars>

Organiser: G. Folger / CERN-IT

Thursday 8 October

LHC PROJECT SEMINAR

at 14.15 hrs – LHC Auditorium, bldg. 30/7th floor

Stability of superconducting strands for the LHC main magnets

by P. BAUER / CERN-LHC

The superconducting strands in the Rutherford type cable can be characterized by their Minimum Quench Energy, i.e. the minimum heat pulse needed to trigger a quench in operation conditions (magnetic field, ambient temperature, current). Point-like (sub mm) a short time (ms) heating has only recently been achieved using the electrical graphite-paste heater technique. This technique has been used in Minimum Quench Energy experiments on strands for the LHC main magnets, designed to operate at 1.9K in peak fields of up to 9T. The aim was to establish the influence of various strand parameters (coating, Cu/Sc ratio, RRR, billet design, cooling) on the Minimum Quench Energy of LHC-type strands. The most striking aspect of repeated measurements on a reference sample is that in open bath conditions the MQE as a function of transport current in subcooled helium can reach hundred times the corresponding value in adiabatic conditions (i.e. with the sample potted in a low conductivity medium). This extraordinary cooling performance of superfluid helium, predicted by many authors, has rarely been shown in superconductor stability experiments.

3 and 4 November 1998

**Joint Meeting of the CERN-SPS and
Gran Sasso Scientific Committees**

Call for ideas

The scientific Committees of the SPS at CERN and of the Gran Sasso laboratories will meet at CERN on 3 and 4 November 1998, to have a thorough discussion of the opportunities offered by a neutrino beam pointing from CERN to GS. This letter is to call for ideas of experiments that could exploit this beam with the purpose of elucidating the pattern of neutrino masses and mixings. It is suggested that documents of up to 10 pages describing these experiments along with a cost estimate be submitted to both Committees **before October 10, 1998**.

To make the meeting more effective, the documents describing appearance and/or disappearance experiments with or without a near station should contain, in the usual Δm^2 vs. $\sin^2(2\theta)$ plot:

- i) the exclusion curve if no signal is observed;
- ii) the limit curve within which a discovery of neutrino oscillations can be made at the 4 sigma level.

These curves should be based on the reference beams with a shared mode of operation (3×10^{19} proton/year on target) and for 3 years of running. Documents on the High Energy and Low Energy beams are being prepared by the CERN/INFN Working Group and will be released by the end of September.

INFORMATIONS GENERALES GENERAL INFORMATION

ADMINISTRATIVE INFORMATICS SUPPORT HELPDESK

The AIS Helpdesk was introduced during 1997 to provide users of Administrative Applications, such as EDH for electronic document creation, BHT for financial data follow-up, AVCL for advances and claims management, HR for Human Resource management, Triton for Stores Management, Siriac for Purchase Management a single entry point for any question related to the application.

In addition to simplifying the procedure for reporting problems it was considered important to record all information concerning utilisation of our applications and to optimise resource use in an effort to give a better service to the end-user.

Since the introduction of this service, users with any problems, questions or suggestions concerning any of our 13 applications are advised to contact the Helpdesk either via telephone (79933) or email ais.support@cern.ch, identifying themselves and giving some precise details about the application they are working with and the problem they are experiencing. The information will then be registered in our request tracking database, which will trigger an email confirmation of the registration to the user simultaneously. When the problem is solved, the user will also be informed via email, with details of the solution. Each email also contains a URL which gives the possibility of exploring more information related to the request on the web.

During the summer of 1998, a questionnaire was run among users of this service. It was web based, and anonymous. We would like to take this opportunity of thanking all 221 users who took the time to complete the questionnaire, and the 100 who also provided us with additional comments. The information has been extremely useful for us for the continuation of this service, and its adaptation based on your feedback.

The results of the questionnaire, and our feedback on the many comments received can all be found at

<http://assuwww.cern.ch/~remedy/results98.html>.

Please note that the French version of this text will be published in next week's issue of the Weekly Bulletin.

AS Division.