

CONGE DE FIN D'ANNEE

Information préliminaire

Le Laboratoire sera fermé le jeudi 24 décembre 1987 au dimanche 3 janvier 1988 inclus. Le premier jour ouvrable de la nouvelle année sera le lundi 4 janvier 1988. De plus amples informations seront publiées en temps utile.

Division du Personnel
Tél. 3238

CHRISTMAS AND NEW YEARS HOLIDAYS

Advance notice

The Laboratory will be closed from Thursday 24 December 1987 to Sunday 3 January 1988 inclusive. The first working day in the New Year will be Monday 4 January 1988. Further information will be made available later.

Personnel Division
Tel. 3238

SEMINARS SEMINAIRES

Monday 22 June

OPEN PRESENTATION

09.00 to 18.00 hrs – Auditorium

The LAA Project

R & D for experimental techniques

- Opening remarks : H. Schopper, Director-General
- General presentation of the LAA project :
A. Zichichi, Project Leader
- High precision tracking devices
- Calorimetry
- Large area devices for muon detection
- Leading particle detection
- Data acquisition and analysis.

Monday 22 June

EP SEMINAR

at 16.30 hrs – Council Chamber

Please note change of place!

A measurement of the spin dependent structure function G_1 of the proton by EMC

by Vassili PAPAVALASSIOU / Yale

The NA2 experiment at CERN has measured the spin asymmetry in deep inelastic muon-proton scattering using a polarized beam and a polarized target. A positive asymmetry was observed in agreement with expectations from the quark-parton model and with previous results from SLAC. The measurement was extended down to the previously unexplored x-Bjorken range of 0.01 – 0.1 allowing a more precise determination of the integral of the spin dependent structure function G_1 . The obtained value for this integral is 0.113 ± 0.012 (stat.) ± 0.025 (syst.), in disagreement with the Ellis-Jaffe sum rule. Implications are discussed.

Mardi 23 juin

PRESENTATION TECHNIQUE

de 14.00 à 16.00 h – Salle de Conférence EF
bât. 13, 2-005

BURR-BROWN SA (USA/CH) propose un exposé suivi de démonstrations sur le thème 'acquisition de données et contrôle de processus avec IBM-PC/XT/AT ou

compatible' au moyen de cartes enfichables servant d'interface entre l'ordinateur et le monde physique. Le système présenté permet les opérations suivantes : entrées et sorties numériques ou analogiques, comptage, génération de fréquences, trigger, etc. Divers logiciels permettent le contrôle de processus, l'analyse de fonction, la représentation graphique, etc.

Langues : français (questions possibles en allemand ou en anglais)

Renseignements : M. Diraison / FI / 4585

Tuesday 23 June

CAS ACCELERATOR SEMINAR

at 14.30 hrs – LEP Auditorium
bldg 30, 7th floor

E778, the SSC/Tevatron non-linear dynamics experiment

by S. PEGGS / LBL

An experiment designated E778 was recently performed at Fermilab to test the design criteria which were used in the SSC conceptual design report for specifying the maximum acceptable tune shifts and non-linear distortions. Strong non-linearities were introduced into the Tevatron by exciting eight special sextupoles. The phase space motion of a kicked beam was followed by recording the turn-by-turn location of the beam in neighboring pairs of beam position monitors. The observed behaviour agrees well with tracking program results. Injection efficiencies and dynamic apertures were measured under various conditions. Interesting results on the direct measurement of resonance widths, and on the effects of tune modulation, were obtained.

Tuesday 23 June

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium*

Heavy quark decays, mixing, and CP noninvariance

by Ling-Lie CHAU / Department of Physics,
University of California, Davis

Recent measurements of neutral B meson mixing, and of neutral kaon (short- and long-lived) decays into two

photons, and their implications are discussed. Exclusive two-body decays of charm mesons are analyzed using the model-independent Quark Diagram Scheme. Some predictions are made for future experimental measurements. Specific *B* meson particle non-leptonic decays are pointed out for experimental measurements to establish the value of $|V_{ub}|$, and to measure $|V_{ub}/V_{cb}|$. General properties of CP noninvariance in partial decay rate differences are discussed, also using the Quark Diagram Scheme. Interesting decays are given for the search of the new decay-amplitude CP noninvariance. Future interesting experiments are pointed out in the event that more than three generations of quarks exist.

* Tea and coffee will be provided at 16.00 hrs.

Wednesday 24 June

PS SEMINAR

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

The ribbon lasertron

by P. MACINTYRE / Texas A & M University

The ribbon lasertron is a new RF amplifier tube designed for Linac collider applications. Three design features permit extension of the lasertron concept to very high frequencies. Firstly, a ribbon beam geometry mitigates space charge depression and facilitates efficient output coupling. Secondly a travelling wave output coupler is used to obtain optimum coupling to a wide beam. Thirdly, a gated field-emitter array is employed for the cathode.

Wednesday 24 June

DD SEMINAR

at 11.00 hrs – LEP Auditorium
bldg 30, 7th floor

Please note unusual time and place!

Cooperative Research at MCC

by Ted RALSTON / European Analyst in
MCC's International Liaison Office

The Microelectronics and Computer Consortium (MCC) is a cooperative research organization of several US Computer manufacturers. The talk will cover the following subjects : origins and history of MCC; strategy and philosophy underlying joint research consortia; organization, staffing and budget of MCC; MCC research program goals, approaches and accomplishments; and university and industry collaboration issues.

Ted Ralston is the European Analyst in MCC's International Liaison Office, where his duties include assessment and evaluation of European advanced research programs in microelectronics and computer science. Prior to joining MCC in August 1983, Mr. Ralston taught political science at Stanford University from 1981-1983, specializing in international security and high technology issues. Prior to joining Stanford, Mr. Ralston served as a professional staff member on the Select Committee on Intelligence of the United States Senate from 1974-1981. Mr. Ralston did his undergraduate degree in pre-medicine at the University of Washington and graduate degree at Oxford University in Politics, Philosophy and Economics.

Wednesday 24 June

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Grassmannians, conformal field theory and strings

by C. GOMEZ / CERN

Infinite dimensional Grassmannians provides the natural mathematical bridge between the operator and the covariant (Polyakov) formulation of strings. An operator formalism for conformal, field theories defined on arbitrary genus Riemann surfaces is presented. As a byproduct one can obtain a general algebraic bosonization of fermions, using the vertex operator representation of infinite dimensional groups. The geometrical meaning of Virasoro for arbitrary genus Riemann surfaces is clarified. Different compactifications of the target space-time and a general framework for a non-perturbative formulation of strings will be also discussed.

Wednesday 24 June

LEP SEMINAR

at 14.30 hrs – LEP Auditorium
bldg 30, 7th floor

Generation and distribution of RF power in the LEP Main Ring

by H. FRISCHHOLZ / CERN-LEP

A total of 16 MW RF power is required for the LEP Main Ring in Phase I. This power is generated by 16 CW klystrons operating at about 352 MHz and supplied to the 128 accelerating structures via high-power junction circulators and a WR 2300 waveguide distribution system. Two klystrons, together with two circulators, 16 accelerating structures, the high-voltage supply, the waveguide system and the associated controls and interlocks, form an RF unit. One such RF unit has been installed in Hall W180 and has reached full RF power, i.e. 2×1100 kW. A report is given on status and performance of the klystrons, circulators and waveguide system.

Thursday 25 June

TECHNICAL PRESENTATION

09.30 to 12.00 hrs and 14.00 to 16.00 hrs
bldg 17, 1-007

KONTRON ELECTRONIC AG (CH) will demonstrate the following development systems : KONTRON (D), universal slave emulator, logic analyzer, portable logic analyzer, industrial PC, universal device programmer, gang device programmer, super micro unix computer KSM 32/8 – GP (GB), low cost device programmer – WAVETEK (D), function and sweep generator – W + W (CH), signal processor recorder – JOFRA (DK), temperature and pressure transducer calibrators – SIGNAALI OY (SF), power supply.

*Languages : English, Deutsch, French
Information : M. Diraison / FI / 4585*

Friday 26 June

CAS ACCELERATOR SEMINAR

at 14.30 hrs – Auditorium

The interdependence of parameters for a TeV linear collider

by R. PALMER / BNL

Linear colliders require high currents, efficient acceleration, low emittance and strong focusing. But the requirements of one often conflict with those of another. High efficiency acceleration, for instance, usually implies larger momentum spread. But larger momentum spread makes strong focusing more difficult. Such interdependence has been studied using a computer design program, and a 'best' choice derived for a 0.5 + 0.5 TeV collider giving a luminosity of $10^{33} \text{ cm}^{-2} \text{ sec}^{-1}$.

INFORMATIONS

GENERALES

GENERAL INFORMATION

MODIFICATION

Veuillez noter que, dorénavant, le numéro de téléphone de M. Harry HAYES/ST est le 2758, et son bip le 2088.

Merci.

RAPPORT ANNUEL 1986

Le Rapport annuel 1986 vient d'être publié. Comme l'année dernière, il se présente en 3 volumes :

Le volume 1, intitulé 'CERN 1986', choisit des faits marquants de l'année et les présente dans un style accessible aux non-spécialistes, avec une abondante illustration. Il est publié en anglais et en français, et ce volume sera probablement celui que la plupart des lecteurs souhaiteront consulter.

Le volume 2, intitulé 'Rapport des activités dans les Divisions', décrit en détail les travaux de l'année dans un langage technique et sans illustrations. Il est publié en anglais et en français en quantités limitées et peut être obtenu sur demande.

Le volume 3, intitulé 'Liste des publications du CERN', regroupe toutes les publications connues traitant de recherches effectuées au CERN pendant l'année. Il est publié en version monolingue en quantités limitées et peut être obtenu sur demande.

Si vous désirez obtenir cette publication, vous pouvez vous adresser :

- soit, aux Bibliothèques centrale et du SPS,
- soit, par écrit, à la Section publications (M.J. Blazianu/Rapport annuel) en précisant bien la langue du volume qui vous intéresse.

Nous vous serions reconnaissants de ne commander que ce qui vous est vraiment nécessaire, les volumes 2 et 3 étant édités en quantités limitées. D'avance, merci.

Sections publications

Vendredi 3 juillet

FESTI-VAL

à 14.30 h – Amphithéâtre

Exposés en l'honneur du 65e anniversaire de Val Telegdi

par les professeurs M. GELL-MANN,
L. MICHEL et B. WINSTEIN

ON RECHERCHE...

...la personne qui attend deux câbles de moniteur couleur SMF-506. Elle est priée de prendre contact avec la réception des marchandises, tél. 4691.

B. Schellenberg

ANNUAL REPORT 1986

The CERN Annual Report for 1986 has just been published. As last year, it is in three-volume format :

Volume 1, entitled 'CERN 1986' selects highlights from the year and presents them in a non-technical style with ample illustration. This volume is being produced both in English and French in the same quantities as in previous years since it is anticipated that this is the volume most readers will wish to see.

Volume 2, entitled 'Report of Activities in the Divisions and Departments', gives a detailed description of the year's work in technical language and without illustration. This volume is being produced in English and French in limited quantities, available on request.

Volume 3, entitled 'List of CERN Publications', groups all the known publications coming from the research at CERN during the year. This volume is being produced in a single language version in a limited quantity, available on request.

Copies are available from :

- the Main Library and the SPS Library,
- or alternatively,
- in writing to Publications Section (M.J. Blazianu/Annual Report), specifying which language version you require.

Since Volumes 2 and 3 are in limited supply, we urge that they are requested only when really necessary. Thank you.

Publications Section