

d'utilisation dans le domaine du retraitement de déchets radioactifs et la production d'énergie sont actuellement à l'étude - notamment par l'équipe du Professeur Carlo Rubbia, prix Nobel 1984 - et pourraient élargir encore leur champ d'application.

La Conférence traitera principalement des aspects techniques de la construction et du réglage des accélérateurs linéaires, mais également ceux liés à leurs diverses applications et aux composants associés. Une exposition industrielle de 10 firmes est également prévue.

La Conférence sera clôturée par une visite des installations du CERN.

Pour plus de renseignements :

E-mail: Linac96@www.cern.ch

Page World-Wide Web : <http://www.cern.ch/Linac96>

The Conference will deal primarily with the technical side of the construction and alignment of linear accelerators but also with their various applications and the related components. There will also be an industrial exhibition of ten firms.

The Conference will finish with a visit to the CERN installations.

For further information:

E-mail: Linac96@www.cern.ch

Worldwide Web: <http://www.cern.ch/Linac96>

SEMINARS SEMINAIRES

Mardi 27 août

PRÉSENTATION TECHNIQUE

à 09.00 hrs – Démo bus, parking bât. 252

Matériel de série basse tension

par A. Rohner, Siemens Suisse SA, Renens

Matériel présenté:

Matériel de série basse tension, à savoir: ASI-Bus sectionneurs, disjoncteurs, relais temporisés, contacteurs, relais de surcharge, démarreurs moteurs, transformateurs, bouton-poussoirs, détecteurs de proximité etc., et également leur toute nouvelle gamme de produits.

Langue: français, anglais, allemand

Information : L.Abel FI-A/79561

Tuesday 27 August

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium*, bldg 500

New determination of Rb in Aleph

by J. STEINBERGER / CERN

The fraction of hadronic Z decays to b quarks, Rb, has been determined on the basis of all Aleph LEP1 data, using two methods : a lifetime-mass hemisphere tag using independent vertices, and a combination of this tag with four others, with improved accuracy, both statistical as well as systematic. The results are :

Lifetime-mass tag : $R_b = .2169 \pm .0011(\text{stat}) \pm .0016(\text{syst})$ and 5 tags : $R_b = .2158 \pm .0009(\text{stat}) \pm .0011(\text{syst})$.

The two results are not independent.

* Tea & coffee will be served at 16.00hrs.

Wednesday 28 August

PS SEMINAR

at 10.00 hrs* – PS Auditorium, bldg 6, 2-024

High Current RF Linac Design with Beam in Thermal Equilibrium

by Martin Reiser / University of Maryland College Park, Maryland, U.S.A.

In the conventional design of RF linacs, the beam is not in thermal equilibrium. For applications requiring high beam currents or high brightness, space-charge forces couple the longitudinal and transverse motion. This generates a rapid relaxation process via collective instabilities which causes excessive emittance growth. A new design strategy is proposed in which the bunches are in thermal equilibrium so that the detrimental equipartitioning processes do not occur. Results from the electron beam experiments at the University of Maryland will be presented.

* PLEASE NOTE UNUSUAL TIME

Wednesday 28 August

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Confinement, supersymmetry breaking and theta parameter dependence in the Seiberg-Witten model

by Ken KONISHI / Genova University

After reviewing briefly the Seiberg-Witten exact solution of $N = 2$ supersymmetric Yang-Mills theory, we discuss the effects of $N = 1$ supersymmetric mass as well as a smaller non-susy gaugino mass added as perturbations. Such a theory is analysed as a theoretical laboratory (or a prototype model for QCD) to study what kinds of dynamical phenomena are possible in non-Abelian gauge theories in four dimensions. Confinement - magnetic monopole condensation - is found to persist at all values of the bare vacuum parameter q_{ph} . At $q_{ph} = -\pi, \pi, 3\pi, \dots$ there are two exactly degenerate vacua: CP invariance is spontaneously broken à la Dashen at those values of q_{ph} . Due to the instanton-induced renormalization effects, the low-energy effective q parameter remains small irrespectively of q_{ph} as long as the gaugino mass is sufficiently small.

Wednesday 28 August

COMPUTING SEMINAR

at 16.00hrs – Council Chamber*, Bldg. 503

Sketches of Padova: Impressions from the first LHC Computing Workshop

Manuel Delfino / Universitat Autònoma de Barcelona

The first LHC Computing Workshop was held on June 11-13, 1996 in Padova. Close to 40 presentations covered the computing parameters of the LHC experiments, the expected evolution of computing hardware, ongoing R&D activities, software development and worldwide collaboration issues. I will present my impressions from the workshop, and make an attempt to make a broad classification of the issues with respect to the currently perceived difficulty of finding solutions.

Organiser : G.Folger / CN

* PLEASE NOTE THE SPECIAL PLACE

Jeudi 29 août

PRÉSENTATION TECHNIQUE

à 09.30 hrs – Bât. 165-R-006

Démonstration du système de réparation METCAL

par C. Imhof / HILPERT electronics LTP SA

Démonstration du système de réparation METCAL permettant de souder et de dessouder les composants SMD ainsi que les composants conventionnels. Soudure des PLCC et QFP par le principe mini-vague. Réparation à l'aide du système TALON et système d'extraction de fumée.

Langue : français, anglais, allemand, espagnol,

Information : L.Abel/ FI-A /79561

Thursday 29 August

SL SEMINAR

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

Luminosity monitors and their applications

by Patrick Puzo/CERN

Since several years, the LEP luminosity monitors are used to optimize on-line the luminosity at the 4 Interaction Points. In 1995, they were also used to control the collision offsets through vernier scans.

They provide a unique way of probing the beams at the IP. This seminar will emphasize on what can be learnt from such detectors.

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

Friday 30 August

MEETING ON PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room

Neutrino spin-flip effects in collapsing stars

by Athar HUSAIN / Dept. of Physics, Quaid-i-Azam University, Islamabad, Pakistan

We study the spin-flavour conversions of neutrinos, $\bar{\nu}_e n_m$, $n_e \bar{\nu}_m$, etc., in the magnetic fields of a collapsing star. For the neutrino mass squared difference $\Delta m^2 \sim (10^{-10} - 10) \text{eV}^2$, these conversions take place in an almost isotopically neutral part of the star, where the relevant effective matter density is suppressed up to 3-4 orders of magnitude. This suppression is shown to increase the sensitivity of the neutrino burst studies to the magnetic moment of the neutrino, μ , by 1.5 - 2 orders of magnitude, and for a realistic magnetic field the observable effect may exist for $\mu \sim (2-3) \times 10^{-14} \mu_B$ (μ_B is the Bohr magneton). It is pointed out that in the isotopically neutral region the effects of the possible twist of the magnetic field on the way of neutrinos can be important, inducing distortion of the neutrino energy spectra and further increasing the sensitivity to μ .

Tuesday 3 September

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs * – Auditorium, bldg 500

Highlights from the conference ICHEP'96 at Warsaw

by Klaus MONIG/CERN

Selected highlights from XXVIII International Conference on High Energy Physics July 1996 at Warsaw will be reported.

* Tea & coffee will be served at 16.00 hrs.