

- **Conditions d'accès au domaine clôturé du CERN**

Cette circulaire opérationnelle a été modifiée.

Elle fait en outre l'objet de mesures d'application publiées dans un document auxiliaire dont la version électronique (voir ci-après) sera mise à jour dès qu'une modification interviendra.

Des exemplaires sont disponibles dans les Secrétariats de Division ainsi qu'aux points de délivrance des cartes CERN.

N.B. Les circulaires administratives et opérationnelles, de même que les listes à jour de ces dernières, sont accessibles pour consultation sous forme de fichiers Word sur le serveur Novell SRV4_HOME.

- Pour y accéder depuis un Macintosh, vous devez vous connecter au serveur **SRV4_HOME** dans la zone Appletalk **NOVELL**, puis choisir le volume **PE Division Data Disk**.

- Pour y accéder depuis un PC, vous devez vous connecter au serveur **SRV4_Home** et dans **Disks & Volumes**, choisir **PE Division Data Disk**.

Les fichiers Word se trouvent dans le dossier **COM**, sous-dossier **Public**.

Division du Personnel
Tél. 74128

SEMINARS SEMINAIRES

Tuesday 2 June

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium, bld. 500*

CLIC, a 0.5-5 TeV compact e^+ linear collider

by Jean-Pierre DELAHAYE / CERN-PS

The status of the Compact Linear Collider (CLIC) study is presented. It is optimised for e^+ collisions at high energy (3 TeV c.m.) and luminosity ($10^{35} \text{ cm}^{-2} \text{ s}^{-1}$) to meet post-LHC physics requirements. Beam acceleration using high frequency (30 GHz) normal-conducting structures operating at high accelerating fields (150 MV/m) significantly reduces the length and, in consequence the cost of the linac. Based on new parameters, the beam stability is similar to lower frequency designs in spite of the strong wake-field dependency on frequency. A novel, cost effective and very efficient scheme for RF power production by the so-called "Two Beam Acceleration (TBA)" method is described. Results from the CLIC Test Facility (CTF) assessing the feasibility of the scheme are reported.

* Tea & coffee will be served at 16.00 hrs

Organiser : Jasper KIRKBY / EP Division

- **Conditions of access to the fenced parts of the CERN site**

This operational circular has been amended.

In addition, it is supplemented by implementation measures published in a subsidiary document. The electronic version of the latter (see below) will be updated as soon as changes occur.

Copies are available from Divisional Secretariats and at CERN card issue points.

Note Administrative and operational circulars, as well as the lists of those in force, are available for consultation as Word files on the server Novell SRV4_Home:

- From a Macintosh, connect to the server **SRV4_Home** in the Appletalk zone **NOVELL** and then choose the volume **PE Division Data Disk**.

- From a PC, connect to the server **SRV4_Home** and in **Disks & Volumes**, choose **PE Division Data Disk**.

The Word files are available in the folder **COM**, sub-folder **Public**.

Personnel Division
Tel. 74128

Vous pouvez aussi consulter

For information on these seminars, please see

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

Wednesday 3 to Friday 5 June

LHC EXPERIMENTS JOINT CONTROLS PROJECT WORKSHOP

09.00-18.00 hrs – Council Chamber, bld. 503

A workshop on the subject of "slow controls" for the LHC experiments will be held at CERN during the period of June 3rd to 5th. The workshop has two principle aims:

(a) to investigate the best practice in the current generation experiments and some of those about to come on-line; and
(b) to obtain input from the LHC experiments on what they see as critical issues.

More details and up-to-date information is available at:

<http://itcowwww.cern.ch/ITCO/jcop/JCOPworkshop/>
or from the IT controls group or experiment controls coordinators.

There is no charge for attendance, but participants must be registered.

Organisers: D.R.Myers and C.Nebout/IT-CO

Wednesday 3 June

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room, bld. 4

A proof of the irreversibility of renormalization group flows

by Jose I. LATORRE / Barcelona University

We present a proof of the irreversibility of renormalization group flows, i.e., the c-theorem for unitary, renormalizable theories in four (or generally even) dimensions. Using Ward identities for scale transformations and spectral representation arguments, we show that the c-function based on the trace of the energy-momentum tensor (originally suggested by Cardy) decreases monotonically along renormalization group trajectories. At fixed points this c-function is stationary and coincides with the coefficient of the Euler density in the trace anomaly, while away from fixed points its decrease due to the decoupling of positive-norm massive modes.

Thursday 4 June

THURSDAY SEMINAR

at 14.00 hrs – TH Conference Room, bld. 4

Lattice chiral gauge theories and asymptotic-free dynamics

by S. AOKI / University of Tsukuba

Recently it has been widely recognized that one has to control well the “rough gauge dynamics” in order to construct chiral gauge theories on the lattice. Recent attempts in this direction, such as the “gauge fixing approach” and “two cut-off approach”, give encouraging results. There exists another possibility to control the rough gauge dynamics, namely the use of asymptotic-free dynamics for the rough gauge degree of freedom, instead of the usual asymptotic non-free dynamics of Higgs-like fields. Taking the domain-wall model in 2(+1) dimensions with SU(2) gauge group, I numerically tested this possibility. In my talk, after a detailed introduction for the problem of lattice chiral gauge theories, I would like to report results of the investigation on the model and discuss the possibility of the extension to 4-dimensional models.

Thursday 4 June

LHC PROJECT SEMINAR

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

Safety with inert cryogenics: an engineering approach

by P. LEBRUN / CERN-LHC

The LHC accelerator and experiments will make use of large amounts of inert cryogenics – helium, nitrogen and argon – in a complex technical environment, located mostly underground. This generates potential hazards per se, as well as in synergy with other factors, which have to be systematically assessed and prevented, using well-established, structured methods developed and applied by experts in engineering safety. Notwithstanding this necessary approach, we wish however to show that the pertinent application of basic physics permits qualitative and quantitative assessment of many issues in cryogenic safety, thus within the grasp of every project engineer. We illustrate this view by analysing cases pertaining to heat transfer, oxygen deficiency, mechanical failure of materials and components, pressure build-up and fluid discharge in LHC components and systems.

Monday 8 to Friday 12 June

WORKSHOP ON COSMOLOGY AND PARTICLE PHYSICS - CAPP-98

Monday 8 June – Auditorium, bld. 500

08.45 - 09.00 Opening remarks

09.00 - 09.45 Wendy Freedman: Measuring the cosmological parameters with the HST

09.50 - 10.35 Saul Perlmutter: Results from the Supernova Cosmology Project

10.40 - 11.00 Will Saunders: Present results from the PSCz galaxy survey

11.00 - 12.00 *Coffee Break*

12.00 - 12.20 Veniamin Berezhinsky: High-Energy Cosmic Rays from Cosmological Relics

12.25 - 12.45 Kai Zuber: Status and perspectives of neutrino mass searches

12.50 - 13.10 Enrique Gaztañaga: Estimators of clustering from different galaxy surveys

13.10 - 14.10 *Lunch Break*

14.10 - 14.55 Robert Kirshner: Cosmological parameters from High Redshift SNe

15.00 - 15.20 Ruth Durrer: Primordial Magnetic Fields

15.20 - 15.50 *Coffee Break*

15.50 - 16.10 Thibault Damour: Gravitation, cosmology, and experiment

16.15 - 16.35 Philippe Jetzer: Gamma Rays from the Galactic Halo

16.40 - 17.00 Franco Occhionero: A bubbly Universe

17.00 - 17.15 *Short Break*

17.15 - 17.35 Tanmay Vachaspati: On random bubble lattices

17.40 - 18.00 Karsten Jedamzik: Primordial Black Hole Formation during QCD epoch

18.05 - 18.25 Robert Caldwell: The missing energy problem in cosmology

18.30 - 18.50 Orfeu Bertolami: S-modular quantum cosmology

Tuesday 9 June – Auditorium, bld. 500

09.00 - 09.45 George Smoot: Review of CMB observations, current and future experiments

09.50 - 10.35 Dick Bond: Theory of CMB temperature fluctuations

10.40 - 11.00 Luca Amendola: Gaussian and non-gaussian structures of the microwave background

11.00 - 12.00 *Coffee Break*

12.00 - 12.20 Max Tegmark: Cosmic complementarity

12.25 - 12.45 Angelica de Oliveira-Costa: Recent results from QMAP

12.50 - 13.10 Jim Bartlett: The promise of the Sunyaev-Zel'dovich effect

13.10 - 14.10 *Lunch Break*

14.10 - 14.55 Avishai Dekel: Cosmological parameters from Large Scale Structure

15.00 - 15.20 Ignatios Antoniadis: Conformal invariance and cosmic background radiation

15.20 - 15.50 *Coffee Break*

15.50 - 16.10 Andy Albrecht: New paradigms for causal structure formation

16.15 - 16.35 Charley Lineweaver: CMB anisotropy constraints on cosmological parameters

16.40 - 17.00 Gia Dvali: Extra dimensions at a millimeter

17.00 - 17.15 *Short Break*

17.15 - 17.35 Enrique Martinez-Gonzalez: Statistical analysis of CMB maps

17.40 - 18.00 Mark Hindmarsh: Cosmic strings, dead again?
 18.05 - 18.25 Joanne Cohn: Some properties of Open Universe Field Theory

Wednesday 10 June – Auditorium, bld. 500

09.00 - 09.45 Andrei Linde: Present status of Inflationary Theory
 09.50 - 10.35 Slava Mukhanov: Theory of cosmological perturbations
 10.40 - 11.00 Robert Brandenberger: Backreaction of cosmological perturbations
 11.00 - 11.30 *Coffee Break*
 11.30 - 11.50 Rocky Kolb: Precision tests of the standard model of inflation
 11.55 - 12.15 Lev Kofman: Reheating and preheating after inflation
 12.20 - 12.40 Richard Holman: Aspects of non-equilibrium QFT with applications
 12.40 - 14.00 *Lunch Break*
 14.00 - 14.40 Peter Coles: Theory of structure formation
 14.45 - 15.15 Joshua Frieman: Large Scale Structure from Galaxy Surveys
 15.15 - 15.40 *Coffee Break*
 15.40 - 16.00 Gabriele Veneziano: Review of Pre-Big-Bang cosmology
 16.05 - 16.25 Nemanja Kaloper: Initial conditions in Pre-Big-Bang cosmology
 16.30 - 16.50 Pierre Binétruy: Topics in strongly coupled superstring cosmology
 16.55 - 17.10 *Short Break*
 17.10 - 17.30 Martin Bucher: Low-density universe and inflation: theory and observations
 17.35 - 17.55 Misao Sasaki: Super-horizon scale dynamics of multi-field inflation
 18.00 - 18.40 Jaume Garriga/Raphael Bousso: Open inflation and the Hawking-Turok model

Thursday 11 June – Council Chamber, bld. 503

The morning session is dedicated to the memory of David Schramm

09.00 - 09.45 David Tytler: Cosmological Baryon Density
 09.50 - 10.35 Gary Steigman: Review of Primordial Nucleosynthesis
 10.40 - 11.00 Rafael Rebolo: Recent results on Li7 abundance
 11.00 - 11.30 *Coffee Break*
 11.30 - 11.50 Alexandre Dolgov: Possible variation of primordial abundances
 11.55 - 12.15 Hannu Kurki-Suonio: Inhomogeneous Big-Bang Nucleosynthesis
 12.20 - 12.40 Jan B. Rehm: Big-Bang Nucleosynthesis with matter/antimatter domains
 12.40 - 14.00 *Lunch Break*
 14.00 - 14.45 Andy Cohen: Review of Baryogenesis
 14.50 - 15.10 Mariano Quirós: Electroweak baryogenesis in the MSSM
 15.10 - 15.40 *Coffee Break*
 15.40 - 16.00 Wilfried Buchmüller: Leptogenesis and Dark Matter
 16.05 - 16.25 Kari Enqvist: Baryogenesis, Dark Matter, and Q-balls
 16.30 - 16.50 Kimmo Kainulainen: Supersymmetric electroweak baryogenesis
 16.55 - 17.10 *Short Break*

17.10 - 17.30 Jean Orloff: Production of antimatter in our galaxy
 17.35 - 17.55 Tomislav Prokopec: Baryons from scalars
 18.00 - 18.20 Michael Joyce: Electroweak baryogenesis on a thick bubble wall

Friday 12 June – TH Conference Room, bld. 4

09.00 - 09.45 Bernard Sadoulet: Searches for Dark Matter
 09.50 - 10.35 Michel Spiro: MACHOs in our halo: present status and prospects
 10.40 - 11.00 Carlos Pérez de los Heros: The AMANDA neutrino telescope
 11.00 - 11.30 *Coffee Break*
 11.30 - 11.50 Paul Baillon: Recent results from AGAPE
 11.55 - 12.15 Joe Silk: Resolving the MACHO mass problem
 12.20 - 12.40 Wayne Hu: The nature of Dark Matter from high-precision CMB and LSS data
 12.40 - 14.00 *Lunch Break*
 14.00 - 14.20 Goran Senjanovic: The monopole problem: 1998
 14.25 - 14.45 Subir Sarkar: High-energy cosmic rays from relic particle decays
 14.50 - 15.10 Leszek Roszkowski: Neutralino as Dark Matter: a theoretical perspective
 15.15 - 15.45 *Coffee Break*
 15.45 - 16.05 Alessandro Bottino: Relic Neutralinos and Dark Matter
 16.10 - 16.30 Domizia Orestano: Recent results from the short baseline neutrino oscillation experiments at CERN
 16.35 - 17.15 Samuel Ting: Hot results from AMS

Wednesday 10 June

COMPUTING SEMINAR

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

Summary of the 15th IEEE Symposium on Mass Storage Systems

by H. RENSHALL / CERN-IT

The IEEE and Nasa Goddard Mass Storage Systems Symposia are now merged into a single annual meeting the last one being held in Maryland from 23-26 March 1998. Papers covered Architectures, with Network Attached Storage being prominent, performance both of storage systems and individual disk and magnetic tape devices, standards emerging in mass storage and some interesting new technologies.

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

Organiser : G. Folger / IT

Friday 12 June

ECFA MEETING

at 09.30 hrs – Council Chamber, bld. 503

- 09.30 1. Approval of the Draft Minutes of the Sixty-second Plenary ECFA Meeting
2. Adoption of the Draft Agenda
- 09.45 3. Chairman's Report
- 10.30 4. Election of the ECFA Chairman for 1999 - 2001
- Coffee*
- 11.30 5. CERN Matters (C.H. Llewellyn Smith)

- 11.45 6. Options for the Future of CERN
(J. Ellis)
Lunch
- 14.30 7. Expected Performance of LEP 1999-2000
(K. Hübner)
- 15.30 8. Report on the ECFA/DESY Workshop on LC
(D. Miller)
- 16.30 9. The CERN/ECFA Outreach Group
(F. Close)
- 17.00 10. Any Other Business.
- 17.15 End of meeting.

Friday 12 June

IT TRAINING TUTORIAL

14.00-16.00 hrs – IT Auditorium, bld. 31/3-004

Introduction to Excel 97

by James PURVIS / CERN-AS

This tutorial is intended as a brief overview of one of the Microsoft Office components, Excel. It covers the following:

- * A brief overview of Excel
- * Whats new & different about Excel97
- * From worksheets to graphics and charts
- * Working with lists and analyzing data with Pivot Tables
- * Taking your data to the Web
- * An Introduction to Application development using Visual Basic from Applications

This is a repetition of the tutorial given last year in August and September.

Information: <http://wwwinfo.cern.ch/support/training>

Organisers: M.Marquina and R.Ramos /IT-User Support

POUR INFORMATION / FOR INFORMATION

LAPP – Laboratoire d'Annecy de physique des Particules
F74941 – Annecy-le-Vieux
Informations : Pascal Perrodo, tél. 04 50 09 16 00

Vendredi 12 Juin

à 14.00 h – Amphithéâtre, bld. 500

La physique des photons directs en collisions hadroniques

par Monique WERLEN / CERN - EP

La recherche d'un Higgs de masse intermédiaire (solution préférée des dernières estimations) se désintégrant en deux photons passe par une détermination précise du fond gamma au LHC. De plus, la mesure des photons directs à grande impulsion transverse dans les interactions hadroniques constitue un des principaux tests de la chromodynamique quantique perturbative. On fera le point de l'état de nos connaissances sur les productions de photon unique et de paires de photons. On analysera les implications phénoménologiques de ces études pour la distribution de gluons dans le proton et la détermination de la constante de couplage des interactions fortes. Les difficultés expérimentales de ces mesures, tant en cible fixe qu'en collisionneurs, seront présentées en détail.

EDUCATION SERVICES EDUCATIFS



Information sur les cours, dates et places disponibles sur WWW:
Information about the courses, dates and places available on WWW :
<http://www.cern.ch/Training/>

ENSEIGNEMENT ACADEMIQUE ACADEMIC TRAINING

F. Benz Secretariat ☎ 73127
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LECTURE SERIES

2, 3, 4 & 5 June

11.00 to 12.00 hrs – Auditorium

Industrial, technical applications of accelerators

by K. BETHGE / Univ. Frankfurt, D

The course should cover the wide range of accelerator application in fields other than nuclear and atomic physics, or medicine. Ion as well as electron accelerators will be included in the discussion of their applications.

Examples from solid state physics, materials science, safety protection, art history and others will be discussed.

LECTURE SERIES

8 & 9 June

11.00 to 12.00 hrs – Auditorium

Medical applications of accelerators

by S. ROSSI / CERN-EP

At Present, about five thousands accelerators are devoted to biomedical applications. They are mainly used in radiotherapy, research and medical radioisotopes production. In this framework oncological hadron-therapy deserves particular attention since it represents a field in rapid evolution thanks to the joint efforts of laboratories with long experiences in particle physics. It is the case of CERN where the design of an optimised synchrotron for medical applications has been pursued. These lectures present these activities with particular attention to the new developments which are scientifically interesting and / or economically promising.