

SEMINARS SEMINAIRES

Please note that the SPSC meeting scheduled for 2-3 September 1997 has been CANCELLED. The next SPSC meeting will be on 28-29 October.

Tuesday 2 September

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium*

Highlights of the 1997 EPS conference

by Joachim MNICH /CERN-PPE

The International Europhysics Conference on High Energy Physics is held on 19-26 August 1997 in Jerusalem. The seminar will highlight the new experimental results presented at the conference, with particular emphasis on high energy colliders.

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

Wednesday 3 September

TECHNICAL PRESENTATION

09.30-17.00hrs – Exhibition Bus, parking Bat. 252

Gas Analysis - Products of Servomex Group

by Dr. M. Müller AG (e-mail: marino@muellerag.ch)

Rep. Servomex Group Ltd.

Servomex Group Ltd. Crowborough UK, Leaders in Gas Analysis, has equipped an exhibition van with a cross-section of their products. Equipment displayed will include oxygen measuring equipment using the zircon dioxide measuring cell or the magneto dynamic principle, i.e. in ambient air monitoring or the monitoring of oxygen in a process. Zirconia cells are used in oxygen trace analysis equipment (xentra 4100) and flue gas measuring systems for boiler efficiency optimisation. Another gas measuring technology is infrared absorption, a technology used for the detection of toxic and flammable gases.

The Servomex Xendos 2500 series uses the proven "single beam - dual wavelength" principle, which cancels effects of changes in detector sensitivity, source energy or tube contamination, thus ensuring excellent long term stability.

Language: English, French, German

Information: L. Abel /SPL/79561

Wednesday 3 September

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Supersymmetry and multi-instantons

by Valentin KHOZE / University of Durham

We propose explicit formulae for the integration measure on the moduli space of charge- n ADHM multi-instantons in supersymmetric gauge theories. The form of this measure is fixed by its (super)symmetries as well as the physical requirement of clustering in the limit of large space-time separation between instantons. Knowledge of the measure

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For full information on these seminars, please see
<http://wwwas.cern.ch/Bulletin/Seminars/current.html>

for all n allows us to revisit, and strengthen, earlier $N = 2$ SUSY results, chiefly: for any number of flavours N_F , we provide a closed formula for the n -instanton contribution to the Seiberg-Witten prepotential as a finite-dimensional collective co-ordinate integral. This amounts to a solution, in quadratures, of the Seiberg-Witten models, without appeal to electric-magnetic duality.

Wednesday 3 September

COMPUTING SEMINAR

at 16.00hrs – IT Auditorium(former CN), bldg 31/3-005

Presenting the Web Office

Web Office Members /IT/WO

It has been evident for some time that it is necessary to publish and maintain high quality information on the Web for the benefit of the entire community.

The Management mandated the Web Office in early 1996, to ensure support and coordination for the Web matters and to be the tool of improved public understanding of CERN and high-energy physics in general.

The Web Office has recently moved into IT Division. Members of the group will briefly present the infrastructure on which the central service is based and the ways to best exploit it.

Development projects now on the way will be described, including:

- a print engine, which can send to the printer a number of interdependent pages in form of a book.
- a tutorial on styles and a set of recommendation for adherence to the CERN guidelines for Web publishing.
- a personalized newspaper of automatically updated links on user selected items.
- a collaboration events' agenda for use by experiments and committees.

Recommendations on server and browser software, search engines and authoring tools will be presented and discussed as well as plans for courses and general user and author information exchange (on the Web, of course). Finally relationships with other CERN entities will be explained.

Organiser: G.Folger / IT

Jeudi 4 septembre

PRÉSENTATION TECHNIQUE

09.30 - 17.00 hrs – Bât. 13/3-005

Analyseurs de gaz par chromatographie

par M. Rikir - ORTHODYNE (Belgique)

- Leader mondial d'analyseurs de gaz par chromatographie, de procès et de laboratoire. ORTHODYNE apporte la solution à tout problème de détection - couvre la gamme du ppb à 100% et de mesure des impuretés dans l'Argon, l'Hélium, l'Azote, l'Hydrogène, l'Oxygène, le Dioxyde de Carbone...
- Détecteurs FID, TCD et/ou DID modulaires combinés permettant une analyse sur mesure, tout en gardant les avantages de la production en série.
- PAS de source radioactive dans les détecteurs avec porteur Argon ou Hélium.

- Programme informatique de base ou logiciel personnalisé.
- Pièces de rechange disponibles 15 ans minimum.

Langue : français, anglais

Information : L. Abel /SPL-PS / 79561

Thursday 4 September

LHC TECHNICAL SEMINAR

at 16.00 hrs – LHC Auditorium, bld. 30/7th floor

Highlights from the CEC/ICMC'97 Conference, 28th July - 1st August, Portland

The joint Cryogenic Engineering Conference(CEC) and International Cryogenic Materials Conference (ICMC) has been held this year in Portland, Oregon, from July 28th to August 1st. Covered topics included large scale refrigeration, cryocoolers, cryofuels, space cryogenics, superconducting cavities, cryostat design, HT and LT superconductors, materials and instrumentation; a considerable fraction of the presented papers being related to LHC.

Seminar coordinator: G. Vandoni/LHC

Thursday 4 September

SCIENCE AND SOCIETY SEMINAR

at 16.30 hrs – Auditorium*

From Genes to Genomes - Chances and boundaries of the New Biology

by Ernst-Ludwig WINNACKER / Institut für Biochemie, München

The goal of my lecture is to show the new dimensions of genome research. It is replacing classic recombinant DNA technologies. The search for single genes is being replaced by the analysis of gene activities of whole cells, organs or organisms. This development changes radically basic biomedical research and points to new therapeutic strategies (examples: cancer, Alzheimer's disease).

I will also show the rapid changes of our understanding of gene activity. Mendel's definition of genes is now replaced by molecular terms which teach us how gene expression is regulated and controlled.

Finally I will try to outline the limits of genetic analysis and how it raises ethical and moral questions. If the analysis of changes in the genetic read-out are related to diseases for which there is no therapy or if such knowledge only predisposes to genetic diseases the handling of such information requires extraordinary care. The genome projects thus have to be and are being pursued in conjunction with careful ethical analyses and assessments.

* Tea & coffee will be served at 16.00 hrs.

Friday 5 September

IT TRAINING TUTORIAL

10.00-12.00 hrs – IT Auditorium, bld. 31/3-004

Introduction to Visual Basic

by Alberto PACE / CERN-IT

An introduction for beginners, based on a live demonstration of Visual Basic, will be made to show the possibilities of 32-bit software development for the Windows NT and Windows 95 platforms.

The demo will try to include issues on user interface design, Web access, database connectivity, and control creation.

Friday 5 September

MEETING ON PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room

Two-loop corrections for b quark decays

by Andrzej CZARNECKI / Univ. Karlsruhe

In order to take advantage of precision studies of fermion decays, two-loop QCD or QED corrections are often required. I review recently developed methods for computing such corrections. Particular attention is paid to the method of eikonal expansions and to the treatment of real radiation of two gluons or photons. Recent applications of these methods are corrections to semileptonic $b \rightarrow c$ decays in special kinematical configurations, which permit an accurate estimate of the inclusive semileptonic branching ratio.

Tuesday 9 September

LEP EXPERIMENTS COMMITTEE

Provisional agenda for the 46th meeting

OPEN SESSION: Tuesday, 9 September 1997 at 09.00 hrs, Main Auditorium

	<u>Reports on the LEP machine:</u>
09.00–09.20	Status of LEP2 and present performance (<i>Mike Lamont</i>)
09.20–09.40	Status of the LEP2 RF system (<i>Gunther Geschonke</i>)
09.40–10.00	Estimates of LEP2 future performance (<i>Daniel Brandt</i>)
	<u>LEP working group reports:</u>
10.00–10.30	Electroweak physics (<i>Robert Clare</i>)
10.30–11.00	Coffee break
11.00–11.30	Higgs particles (<i>Peter Igo-Kemenes</i>)
11.30–12.00	Four-jet events (<i>Dieter Schlatter</i>)
	<u>Energy request:</u>
12.00–12.20	ALEPH request for 131/136 GeV running (<i>Peter Dornan</i>)
12.20–14.30	Lunch

CLOSED SESSION: Tuesday 9 September 1997 at 14.30 hrs, 6th floor Conference Room.

Tuesday 9 September

IT TRAINING TUTORIAL

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

Introduction to Excel 97

by James PURVIS / CERN-AS