

# SEMINARS SEMINAIRES

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## Tuesday 5 & Wednesday 6 November

SPS AND LEAR EXPERIMENTS COMMITTEE

### Open session

at 09.00 hrs – Auditorium

Antihydrogen production and precision experiments (SPSLC 96-43 / P302): M. Holzscheiter.

A search for energy loss of neutrinos in matter (SPSLC 96-43 / P301): F. Vannucci.

Progress report on DIRAC (PS212): L. Nemenov.

Status report from WA102: A. Singovsky.

### Closed session

at 14.00 hrs (to be continued on

Wednesday 6 November at 09.00 hrs, 6<sup>th</sup> fl. Conf. Room,  
if necessary)

## Tuesday 5 November

TECHNICAL PRESENTATION

at 10.00 hrs – CN Auditorium, bldg 31/3-004-5

### Technical Publishing with FrameMaker and WebMaker

by Mario RUGGIER / CERN/ECP-IPT

Do you need to produce, deliver and maintain technical documentation?

The best Technical Publishing solution today is probably Adobe FrameMaker. Technical Publishing differs from Word Processing or Desktop Publishing mostly in the type of documents that it is concerned with, i.e. documents that are both complex and long, at which FrameMaker excels.

During the presentation you will see demonstrations of some of the features that make FrameMaker the leading Technical Publishing system. Amongst the most important are importation of graphics by copy and by reference, native drawing tool, formatting of equations, spot-colour separations, page design and layout, book building, templates, a mark-up language, and automatically generated lists such as the table of contents, list of figures and index. The current few hundred FrameMaker users at CERN typically use it to prepare software documentation, technical reports, and requirements and design documents.

You will see how you can use Harlequin WebMaker, originally a product from the IPT group of ECP, to process your FrameMaker technical documents and automatically generate structured multi-file webs with full tables of content and customised navigation panels, for delivery on WWW.

CERN has site licenses for both FrameMaker and WebMaker for the UNIX, Windows and Macintosh platforms. You will find information on how to access FrameMaker and WebMaker at CERN from the WWW pages of the Software Development Tools: <http://www.cern.ch/PTTOOLS/>

The presentation will last up to 1.5 hours, including the demos and a QA period at the end. There will be an afternoon session in building 1, R-009 for anyone interested in continued discussion of related issues.

Organiser : S. Cannon / CN / 75036

## Wednesday 6 November

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

### Theories with gauge-mediated supersymmetry breaking

by Gian GIUDICE / CERN-TH

Theories with gauge-mediated supersymmetry breaking provide an elegant solution to the problem of unacceptable flavour violations, present in a generic supergravity theory. I review recent developments in the construction of models based on gauge-mediated supersymmetry breaking, and discuss their phenomenological implications and their open problems.

## Wednesday 6 November

COORDINATION DES CONTROLES INDUSTRIELS  
DE PROCESSUS (CCIP)

at 14.00hrs – LHC Conference Room, bldg 30/7-012

### Experience with the RTworks products in developing the Technical Data Server (TDS)

by Pierre NININ / CERN-ST-MC

Rtworks is a set of commercial products for real-time data management. The CERN Technical Data Server project is using these products to provide the TCR control room with efficient display and alarm facilities.

Organiser: LHC-IAS/C.H.Sicard/79544

## Thursday 7 November

CAS ACCELERATOR SEMINAR

The Twelfth Lecture

in the John Adams' Memorial Lecture Series

at 14.15 hrs – Auditorium\*

### 50 Years Of Synchrotrons

#### Early years in Europe

by J.D. LAWSON (retired from RAL)

Fifty years ago Frank Goward of the Atomic Energy Research Establishment Group at Malvern converted a small American betatron to make the world's first synchrotron. At the same time Marcus Oliphant was planning to build at Birmingham a large proton machine with a ring magnet and variable magnetic field. Ideas for this had come to him during night-shifts tending the electromagnetic separators at Oak Ridge during the war. Some seven years later, in 1953, a group gathered together in Geneva to build the PS. A major contributor to the design work which had made this possible was John Adams. An account of some of the achievements in these eventful years will be presented.

### The CERN Synchrotrons

by G. BRIANTI (retired from CERN)

CERN has built nine synchrotrons/colliders and two temporary test rings. Eight machines are still running. The review will start with the PS, the first proton synchrotron

based on the alternating gradient principle invented in 1952 at BNL. The design work of the PS team, under the enlightened leadership of J.B. Adams, and the construction of the machine will be evoked with its successful commissioning at the end of 1959. The remaining synchrotrons, colliders and storage rings will be briefly discussed, with special emphasis on the other major contribution of J.B. Adams to CERN, the SPS, followed by its conversion to the first  $pp^-$  collider. In most cases, initial, nominal and final performance will be outlined. Major conceptual and constructional advances will also be indicated, leading to a large reduction in the cost per GeV. Finally, after an intensive R&D programme, the construction of the LHC is about to start.

\* *Tea and coffee will be served after the lecture (~16.00h) in the Salle des Pas Perdus*

## Friday 8 November

### MEETING ON PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room

#### **Current problems in quarkonium production**

by Mikko VÄTTINEN / NORDITA

There has been a lot of interest in quarkonium production during the recent years, due to the availability of new data from various experiments, the identification of parton fragmentation as a dominant production mechanism at large transverse momentum, and the advent of the non-relativistic QCD factorization formalism. At the moment, a complete theoretical understanding of quarkonium phenomenology still seems to be lacking.

We discuss and compare the implications of various theoretical approaches in different experiments, with special emphasis on fixed-target hadroproduction. In particular we discuss predictions on the final-state polarization of quarkonia.

## Monday 11 November

### TECHNICAL SEMINAR

at 11.00 hrs – ECP Conference Room, bldg 13/2-005

#### **Electromagnetic Compatibility in High Energy Physics**

by Fritz SZONCSO / CERN/ECP

After an overview on EMC basics and facts, focus will be given on EMC phenomena relevant to high energy physics installations. Compliance with EMC regulations currently in effect will be an issue for experiments using densely packed electronics. However, EMC regulations are only a starting point because experiments ask for lower susceptibility levels and somewhat more exotic requirements than usual. Problems likely to arise in LHC-experiments will be given coverage as far as known today. Test methods using high energy physics laboratory equipment make preliminary EMC-testing available at small cost.

## Wednesday 13 November

### COMPUTING COLLOQUIUM

at 16.00 hrs – Auditorium

#### **Applying Object-Oriented Software Engineering at the BaBar Collaboration**

by Bob JACOBSEN / UC Berkeley

## Thursday 14 November

### SL SEMINAR

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

#### **SPS Secondary Beams and the Physics Programme**

by Konrad ELSENER / CERN