

SEMINARS SEMINAIRES

Monday 9 November

TECHNICAL PRESENTATION

14.00-16.00 hrs – Building 13, conf. room 2-005

Presentation of TRIAX and DEVELCO (Denmark)

TRIAX A/S is one of Europe's largest manufacturers of antennas, for radio and TV reception, both terrestrial and satellite disks, and the electronic peripherals for these antennas (amplifiers, filters, receivers and decoders). TRIAX can do the production, test and final assembly of electronic modules. Development of electronic modules and test equipment either in house or in association with 3 external development companies, with whom they have long standing relationships.

DEVELCO is complementary to TRIAX and it operates as the developer, system integrator and test support centre.

Language: English

Information: F.Bourgeois / DSU

Wednesday 11 November

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room, bldg 4

String breaking in non-Abelian gauge theories

by Owe PHILIPSEN / CERN - TH

It has been a long-standing problem in QCD to detect "string breaking", i.e., the breakdown of linear confinement with increasing distance between static colour sources, by means of computer simulations. Despite a lot of effort, there has been no hard evidence for this phenomenon so far. Clear numerical evidence for string breaking is presented in the 3d SU(2) Higgs model with fundamental matter fields through a mixing analysis between Wilson loops and meson operators. It is shown that the standard Wilson loop calculations are not suitable to extract the static potential at large distances. The breaking scale is calculated in the continuum limit. We also investigate the static potential for adjoint colour sources and discuss the implications of the results for QCD.

Thursday 12 November

LEP EXPERIMENTS COMMITTEE

at 09.00 hrs – Main Auditorium, bldg 500

Provisional agenda for the 50th meeting

OPEN SESSION

Report on the LEP machine:

09:00 - 09:30 LEP2 performance (*Ghislain Roy*)

Reports on physics and the LEP experiments:

09:30 - 10:00 Theoretical uncertainties in the W mass reconstruction (*Valery Khoze*)

10:00 - 10:30 ALEPH (*Eric Lançon*)

10:30 - 11:00 Coffee break

11:00 - 11:30 DELPHI (*Vanina Rühlmann*)

11:30 - 12:00 L3 (*Bob Clare*)

12:00 - 12:30 OPAL (*David Plane*)

12:30 - 14:00 Lunch

CLOSED SESSION: at 14:00 hrs, 6th floor Conference Room

Vous pouvez aussi consulter

For information on these seminars, please see

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

Thursday 12 November

THURSDAY SEMINAR

at 14.00 hrs – TH Conference Room, bldg 4

Neutrino mass textures and the Super-Kamiokande data

by S. LOLA / CERN - TH

We discuss models of neutrino masses and mixings, in the light of the recent observations by Super-Kamiokande. As a first step, we use the data from various experiments, in order to obtain a phenomenological classification of neutrino mass textures. We then investigate how the required patterns of neutrino masses and mixings are related to the flavour structure of the underlying fundamental theory. In supersymmetric extensions of the Standard Model, renormalisation group effects can have important implications: for small $\tan\beta$, bottom-tau unification indicates the presence of large μ -tau flavour mixing. Moreover, it is possible to demonstrate by simple expressions that, for large $\tan\beta$, very small mixing at the GUT scale can be amplified to maximal mixing at low energies, and vice-versa. Passing to specific models, we first discuss the predictions for neutrino masses in the simplest schemes with Abelian flavour symmetries that are consistent with the known quark and charged lepton hierarchies. We then proceed to analyse what are the expectations in representative GUT models (including superstring-embedded solutions). Finally, we propose direct ways to look for lepton number violation in ultra-high energy neutrino interactions.

Thursday 12 November

CERN HEAVY ION FORUM

at 14.00 hrs – Conference Room, bldg 160/1.009

Charmonium suppression in heavy ion collisions by prompt gluons

by Boris KOPELIOVICH / MPI

In relativistic heavy ion collisions, also the bremsstrahlung of gluons in the fragmentation regions of the nuclei suppresses the produced charmonium states. In the energy range of the SPS, the radiation of semi-hard gluons occurs in the Bethe-Heitler regime and the density of gluons and therefore the suppression goes like $(AB)^{1/3}$, where A and B are the nucleon numbers of the projectile and target nuclei. In contrast, the suppression via collisions with nucleons is proportional to $(A^{1/3} + B^{1/3})$. Parameter free perturbative QCD calculations are in a good agreement with the data on J/Psi and Psi' suppression in heavy ion collisions at SPS CERN. At higher energies (RHIC, LHC) the number of gluons which are able to break-up the charmonium substantially decreases and the additional suppression is expected to vanish.

Organisers: Yiota Foka and Carlos Lourenço

Friday 13 November

at 09.00 hrs – PS Auditorium, bldg 6 2-024

Plenary session of the Prospective Study on Muon

Colliders at CERN

AGENDA

- 09.00 Introduction, by Alain Blondel (Ecole Polytechnique, Palaiseau)
09.15 High intense linacs, by J.M. De Conto (INS, Grenoble)
09.50 High power targets, by Roger Bennett (RAL)
10.25 High field solenoids, by Johan Collot (INS, Grenoble)
11.00 *Coffee break*
11.30 What can we learn from precision measurements on Higgses? by Patrick Janot (CERN)
12.05 Measurement of beam parameters, by Alain Blondel (Ecole Polytechnique, Palaiseau)
12.40 *Lunch break*
14.00 Theorist's standpoint on neutrino oscillations, by Pilar Hernandez (CERN)
14.30 ν_τ appearance experiments, by Jaap Panman (CERN)
14.50 Deep inelastic scattering with neutrinos, by Maarten de Jonghe (NIKHEF)
15.10 Summary of SPSC meeting on neutrino physics, by Luigi di Lella (CERN)
15.30 *Coffee break*
16.00 High energy frontier, by John Ellis (CERN)
16.30 Neutrino radiation, by Colin Johnson and Marco Silari (CERN)
17.00 A muon complex on the CERN site? by Bruno Autin (CERN)

Organiser: B. Autin/PS

Friday 13 November

MEETING ON PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room, bldg 4

η - η' mixing

by T. FELDMANN / University of Wuppertal

The current status of the determination of η - η' mixing parameters is discussed. The importance of a proper definition of basis states, taking into account flavour symmetry breaking effects, is pointed out. Only then does one find values for the mixing angle and the decay constants that are consistent with both theoretical constraints connected to the $U(1)_A$ anomaly and phenomenological numbers from low- and high-energy experiments. Within the same approach, also a small charm component inside the η and η' mesons is estimated.

Tuesday 17 November

TECHNICAL PRESENTATION

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

VISUAL HDL

by J. MARKARIAN, J.-P. TILLEUX / SUMMIT-DESIGN INC (France).

Information: S.Brobecker / IT Tel 78693

Organiser : S. Cannon / IT / 75036

Tuesday 17 November

CERN HEAVY ION FORUM

at 14.00-16.00 hrs - Conference Room 60-6-015

Summary of "Strangeness in Quark Matter 98" conference held in Padova.

by Roman LIETAVA and Ulrich HEINZ / CERN

Organisers: Yiota Foka and Carlos Lourenco

Thursday 19 November

4TH ORACLE DEVELOPERS FORUM

at 9.30 hrs - IT Auditorium, bldg 31/3-004

Information: <http://www.wlhc01.cern.ch/odf/odf4.html>

Organiser: Pedro Martel/EST-ISS

POUR INFORMATION / FOR INFORMATION

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Mercredi 11 novembre 1998

SÉMINAIRE DE PHYSIQUE CORPUSCULAIRE

à 17.00 h - Auditoire Stückelberg

Highlights from ICHEP98

par le Dr D. Macina, C. Paus-Cecchi, L. Moneta /
Université de Genève/DPNC

A summary of the most important news from the Conference ICHEP98 will be given on the following subjects :

- Neutrino oscillations
- Electroweak physics at LEP and SLD
- Higgs search at LEP
- Heavy quark physics
- Search of new particles at the existing colliders
- Most recent developments in cosmology.

LAPP – Laboratoire d'Annecy de physique des Particules

F74941 – Annecy-le-Vieux

Informations : Pascal Perrodo, tél. 04 50 09 16 00

Vendredi 13 Novembre

à 14.00 heures – LAPP Auditorium

L'expérience ATHENA

Rolf Landua / CERN, Genève