

SEMINARS SEMINAIRES

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

Monday 25 November*

MEETING ON PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room

How to find a Higgs boson with a mass between 155-180 GeV at the LHC

by M. DITTMAR / CERN

We reconsider the signature of events with two charged leptons and missing energy as a signal for the detection of the Standard Model Higgs boson in the mass region $m_H = 155-180$ GeV. It is shown that a few simple experimental criteria allow to distinguish events originating from the Higgs boson decaying to $H \rightarrow W^+W^-$ from the non-resonant production of W^+WX at the LHC. With this set of cuts, signal to background ratios of about one to one are obtained, allowing a $5-10 \sigma$ detection with about 5 fb^{-1} of luminosity. This corresponds to less than one year of running at the initial lower luminosity of $L = 10^{33} \text{ cm}^{-2} \text{ s}^{-1}$.

**Please note unusual day*

Tuesday 26 November

TECHNICAL PRESENTATION

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

Trends in Data Storage development.

by Per ERNEDAL / NMG Sweden AB

The demand for data storage is growing rapidly, some reports tell us that the growth is 100% per year. How will we be able to administer all servers, disk drives and disk sub-systems in the network?

RAID-systems and network attached RAID-systems give control of the storage in a network. It combines security, large capacity and performance in a cost efficient way.

NMG Sweden represents the MetaStor product line from Symbios Logic, a founding member of the RAID Advisory Board (RAB) and a leader in RAID Technology.

Organiser : S. Cannon / CN / 75036

Tuesday 26 November

SCIENCE AND SOCIETY SEMINAR

at 16.30 hrs – Theory Auditorium*

Contributions of Women to Physics 1898-1975

by Nina BYERS / UCLA

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

Mercredi 27 novembre

PRÉSENTATION TECHNIQUE

09.30 à 16.30 hrs – Bât. 165/R-001

Présentation du matériel destiné à la mise en œuvre des gaz purs

par J.M. BASTOUL / INSTRUFLUID (FR)

Raccords pour soudure orbitale ou type VCR, vannes à boule, détendeurs panneaux de gaz, ensemble détente, centrales de détente.

Matériel exposé : Tubes raccord inox à souder, électropolis, passives, vannes à boule détendeurs ensemble de détente électropolis et passives, filtres céramique, débitmètres massiques, panneau de gaz, centrales de détente.

Langues : français, anglais

Informations : L. Abel / FI-A / 79651

Wednesday 27 November

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Magnetic screening in the high-temperature phase of the standard model

by Wilfried BUCHMULLER / DESY

Non-perturbative effects on observables of the electroweak theory at high temperatures are characterized by a magnetic screening length. Its size influences the range of validity of perturbation theory, and it also determines the critical Higgs boson mass where the first-order phase transition changes to a crossover. Some conjectures are made concerning its role in gauge-dependent and gauge-invariant correlation functions.

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

Wednesday 27 November

COMPUTING SEMINAR

at 16.00 hrs – CN Auditorium, bldg. 31/3-005

The HERMES Data Production PC Farm

by W. WANDER / Univ. Erlangen-Nuernberg,
HERMES@DESY

Commodity computing hardware nowadays offers large gains in the price/performance ratio and therefore becomes more and more attractive to HEP experiments. A large increase in the computing power requirements at the HERMES experiment at DESY forced us to double our available offline CPU resources by building up a PC farm of 10 PPro systems in Sep 96. The choice of the operating system was based on the requirements for data and monte-carlo production and led to the Unix flavour Linux. It was shown that moving towards inexpensive and powerful commodity hardware can be achieved with very little overhead in software porting cost.

Organiser : G.Folger / CN

Thursday 28 November

LHC SEMINAR

at 14.15 hrs – LHC Auditorium, bldg. 30 (7th fl.)

Design Aspects and State of the LHC Main Magnets

by Romeo PERIN / CERN-LHC

The LHC main dipoles and quadrupoles are the most important components of the LHC from the cost point of view and technologically the most advanced. In particular the 1232, 15 m long superconducting dipoles require a design at the limits of to-day technology, as they mainly determine the LHC attainable energy with their field level, and luminosity with their field quality. Short models and long prototype magnets have been built and tested, and a string of magnets simulating a half basic cell of the machine has already successfully completed more than 1500 excitation cycles. Critical design aspects of these magnets will be reviewed and the state of their development will be presented together with the first steps taken for their series production.

* *Please note the unusual time.*

Thursday 28 November

SL SEMINAR

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

Electrostatic Separators in LEP

by Brennan GODDARD / CERN

Parallel plate electrostatic separators are used in LEP to produce separation between circulating electron and positron bunches, in order to increase the current which can be brought into collision. This talk aims to provide an overview of the separator hardware, the different separation schemes used so far in LEP, and the problems associated with operating high voltage, high field devices in a high energy particle accelerator.

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

Thursday 28 November

IEE LECTURE

at 16.30 hrs – bldg. 160/1-009

Power Systems Reliability, Concepts, Assessment and Application

by R.N. ALLEN / Manchester Centre for Electrical Energy, UMIST, Manchester, Great Britain

The talk will address and review the concepts, assessment procedures and application of reliability evaluation techniques associated with the complete range of power system zones including generation, transmission and distribution. The important issue of the relationship between reliability and economics will also be discussed.

All are welcome

Organised By The Institution Of Electrical Engineers

Friday 29 November

ECFA MEETING

(ECFA : European Committee For Future Accelerators)

at 09.30 hrs – Council Chamber

1. Approval of the Draft Minutes of the Fifty-ninth Plenary ECFA Meeting
2. Adoption of the Draft Agenda
3. Chairman's Report
4. Status Report on LHC
(C.H. Llewellyn Smith)

5. Possible ECFA Resolution on CERN Budget Reductions
6. Report on the ECFA/DESY Workshop on Linear Colliders
(Speaker to be announced)
7. Presentation of the 1995 ECFA Census
8. The ECFA Terms of Reference
9. The Dubna Programme
(A.N. Sissakian)
10. The LNGS (Laboratori Nazionale di GranSasso) Programme
(P. Monacelli)
11. ECFA Meetings in 1997
12. Any Other Business.

Friday 29 November

TECHNICAL SEMINAR

at 10.00 hrs – CN Auditorium, bldg. 31/3-005

Cas.Cade : Object Oriented Software Factory

by Sana ABOU HAIDAR / Matra Datavision S.A. (FR)

CAS.CADE is a general purpose software development environment particularly suited to scientific and technical work. Object Technology based analysis and modelling enhance productivity - C++ code and user interfaces can be produced automatically - and several leading products in the O-O database market fit neatly into the CAS.CADE scheme. A complete set of class libraries covers, for instance, 2D and 3D geometrical modelling and visualization. In the course of the overview, demonstrations will illustrate aspects of CAS.CADE. Finally an impressive range of products on UNIX and Windows/NT will be shown.

Information : R. Messerli / CN-CE / 160138

Friday 29 November

SPECIAL MEETING ON PHENOMENOLOGY

at 11.00 hrs* – TH Conference Room

Determining the beta function of the strong interaction and closing the light gluino window

by Zoltan FODOR / CERN

The perturbative running of α_s is discussed in a model-independent way. The analysis contains the data on the hadronic tau decay and all the total hadronic cross-sections in e^+e^- annihilation between 5 GeV and MZ. The colour coefficients and the perturbative beta function of the strong interaction are determined. The perturbative approach shows a nice convergence of the confidence level (CL) regions. The results are in agreement with QCD and rule out the QCD+light gluino scenario on the 90% CL. Combining the above method with the multijet analysis at LEP, the QCD+light gluino scenario is ruled out on the 99% CL.

* *Please note unusual time*

Monday 2 December

ISOLDE EXPERIMENTS COMMITTEE

Open session

at 14.00 hrs – Council Chamber

1. Introductory remarks by the Chairman.
2. Progress report by the ISOLDE Technical Group Leader.

3. ISOLDE Coordinator's report.

4. Magnetic Moment of ^{67}Ni (Oxford - Maryland - Michigan State University); ISC 96-28/P79; J. Rikowska.

5. Measurement of the Magnetic Moment of $T = 3/2$ Nuclei in the S-D Shell using the tilted Foil Polarization Technique; ISC 96-31/P87; M. Hass.

6. Proposal: Electron Paramagnetic Resonance Investigations of Isolated Impurities and Impurity Pairs in Silicon (CERN - TU Berlin); ISC 96-23/P83; A. Näser.

7. Gold and Platinum in Silicon - Isolated Impurities and Impurity Complexes (Aarhus - Amsterdam - Dublin - Konstanz - Lisboa - CERN Collaboration); ISC 96-26/P81 Add.1; C.A.J. Ammerlaan.

8. Proposal: Surface Studies by Nuclear Stimulated Desorption (Berlin - CERN - Rutgers - Tel Aviv Collaboration); ISC 96-25/P84; I. Kelson.

9. Investigations of Deep-Level Fe-centers in Si by Moessbauer Spectroscopy; ISC 96-29/P85 (Aarhus - Berlin - Göttingen - Konstanz - Troitzk - CERN Collaboration); G. Weyer

10. Studies of High-Tc Superconductors Doped with Radioactive Isotopes; ISC 96-30/P86 (Aveiro - Göteborg - Grenoble - Leipzig - Leuven - Lisboa - Porto - Sacavém - Stockholm - Warsaw - CERN Collaboration); J.G. Correia.

Closed session

after the Open Session, 6th Floor Conference Room, Main Building.

Tuesday 3 December

OPEN ISOLDE COLLABORATION MEETING

at 09.00 hrs (until 13.00 hrs) – Conf. Rooms, bldg. 304/1-001 A+B

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|-------------|---|
| G. Huber | Opening |
| H. Ravn | Restricted target operation in 1996 (UC target, robot etc.) |
| J. Lettry | New target developments |
| D. Habs | REX ISOLDE status |
| W. Gelletly | Possible radioactive beam facility at ISIS |
| O. Tengblad | Data taking with GOOSY and beyond A.O.B. |

Tuesday 3 December

TECHNICAL PRESENTATION

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

Nat Systems: a global strategy in terms of Enterprise C/S development

by Philippe SCHMITT, Responsable Marketing France, Nat Systems Inc., Palo Alto, USA

During the last seven years, Nat Systems has worked with
Organiser : S. Cannon / CN / 75036

Tuesday 3 December

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium

Anomalous J/psi suppression in Pb-Pb collisions at CERN SPS

by Olivier DRAPIER / Université Claude Bernard; Lyon

Mercredi 4 décembre

LANCEMENT DE LIVRES CERN

à 16.30 – Amphithéâtre C, sous-sol, bât. 40

'A La Recherche de L'Infini' et 'Nel Mistero dell'Universo', les versions françaises et italiennes du livre 'Search for Infinity', par Gordon Fraser, Egil Lillestøl et Inge Sellevåg, et éditées respectivement par Flammarion, Paris, et De Agostini, Novara

Introduction – Prof. L. Foà,

Présentations – les éditeurs, les auteurs, Prof. J. Steinberger

(Les 3 versions – anglaise, française, italienne – sont en vente au CERN à un prix spécial de 35 SF, à la réception du bât 33. Les versions françaises et italiennes seront disponibles le 4 décembre au bât. 40.)

EDUCATION SERVICES EDUCATIFS



ENSEIGNEMENT GENERAL GENERAL EDUCATION

SCIENCE POUR TOUS par Rafel Carreras

Jeudi 28 novembre
à 13h.00 – Amphithéâtre

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/>