

SEMINARS SEMINAIRES

MONDAY 18 FEBRUARY

EP SEMINAR

at 17.00 hrs - Auditorium

"Observation of charmed baryon production at SPEAR"

by H. Taureg / CERN

Abstract : We observe a peak in the $pK^-\pi^+$ and $\bar{p}K^+\pi^-$ invariant mass spectrum at 2.285 ± 0.006 GeV/c², which we associate with the lowest-lying charmed baryon state (Λ_c). We measure a cross-section times branching ratio of 0.037 ± 0.012 nb at $\sqrt{s} = 5.2$ GeV. We present a measurement of inclusive p and Λ production, allowing us to estimate the branching ratio $B(\Lambda_c \rightarrow pK^-\pi^+) = 0.022 \pm .010$. Preliminary results on three more decay modes ($\Lambda_c \rightarrow p\bar{K}^0$, $p\bar{K}^0\pi^0$, $pK^-\pi^+\pi^0$) will be presented as well as limits on final states with Λ -hyperons.

TUESDAY 19 FEBRUARY

PRESENTATION TECHNIQUE

- 09h00/10h30 : Conférence
Salle 2-005, Bât.13 (D2 plan CERN Meyrin)
- 14h00/16h30 : Exposition
Salle 2-027, Bât.73 (E1 plan CERN Meyrin)

M.D.R. ISOLATIONS SA (CH) propose une conférence et une exposition sur les matériaux de construction dans les domaines suivants : protection incendie - isolation thermique - correction acoustique - isolation phonique - traitements et revêtements spéciaux.

Langue : Français.

Renseignements : M. Diraison / FI / 4585.

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs - Auditorium (*)

"Photon-induced nuclear processes"

by A. Molinari / Univ. of Torino and CERN

Abstract : Photon-induced nuclear processes are revisited. The attention is focused on those topics where further investigations, carried out with the synchrotron radiation associated with LEP are expected to promote an advance of our knowledge of the nuclear response function. A few of the possibilities offered by experimenting with laser photons backward scattered by the electrons of LEP are also considered.

(*) Note : Those attending this seminar are cordially invited to the Salle des Pas Perdus (just outside the Council Chamber) at 16.00 hrs to meet the speaker and for informal discussions. Tea and coffee will be provided.

WEDNESDAY 20 FEBRUARY

PRESENTATION TECHNIQUE

09h00/16h30 - Bus de démonstration

Parking PTT, Bât. 63 (C2 plan CERN Meyrin)

ROSCHI TELECOMMUNICATION AG (CH), représentant ROHDE & SCHWARZ (D), propose une exposition-démonstration en instrumentation électronique de laboratoire : ensemble de mesure VHF/UHF programmable (BUS-IEC en BCD et code ASC II) type MSUP - tables traçantes ZSK2, ZSKT - mesureurs d'impédance ... - millivoltmètres... - place de mesure pour ondes courtes/HI-FI SMUV, HF, SMPU, NGPU... - étalons de fréquences - sonométrie - ensemble à wobulation, SWOB5.

Langues : Allemand, anglais, français.

Renseignements : M. Diraison / FI / 4585.

THEORETICAL SEMINAR

at 14.00 hrs - Theory Conference Room

"Algebraic derivation of superspace constraints"

by K. Stelle / London

DD SEMINAR

at 16.00 hrs - DD Auditorium
(Bldg.31 - 3rd floor)

"APL Data Base Applications"

by T.P. Jensen / CERN

Abstract : Some data base applications at CERN are too complicated to be solved without a fairly large programming investment when using conventional data base systems. In cases where the amount of data is small this investment can be minimized by using simple, yet powerful, data base systems which are imbedded in a high level language like APL (*). The seminar will describe the status of APL at CERN, the relational data base management system (APLR) designed and implemented at CERN, and show some examples of its use from the existing applications.

(*) A Programming Language designed for direct interactive use without compilation.

THURSDAY 21 FEBRUARY

ESO ASTROPHYSICS SEMINAR

at 14.00 hrs - DD Auditorium
(Bldg.31 - 3rd floor)

"Dissipational Galaxy Formation :
Confrontation with Observations"

by C. Norman / Leiden

THURSDAY 21 FEBRUARY

CERN ENERGY SEMINAR

at 16.30 hrs - Auditorium (*)

"The Deep Earth Gas : will it resolve the energy crisis ?"

by T. Gold / Cornell Univ.

Abstract : The high concentration of carbon on the surface of the Earth is the result of carbon gases having emerged from deep down, in the course of geologic time. This outgassing appears to be a gradual process, and carbon emerges in both oxidized and unoxidized form, as CO₂ and as CH₄. Hydrocarbons, common in some meteorites, would be a likely constituent of the early solar system, and their inclusion in the forming Earth would be a possible source of methane outgassing. Much detailed evidence shows that outgassing is related to major fault-lines, assists in the generation of earthquakes, and that the emerging gases are frequently rich in methane. The known hydrocarbon deposits, partly of biological origin, may have been greatly augmented by absorption and modification of such methane. A theory of the mechanics of outgassing would predict that very large quantities of the deep source gas are frequently arrested in their ascent, at depths that can readily be reached by drilling. The quantities involved are orders of magnitude larger than those of conventional oil and gas exploitation.

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MONDAY 25 FEBRUARY

EP SEMINAR

at 17.00 hrs - Auditorium

"Observation of the T family at CESR using the CUSB detector"

by P. Franzini / Columbia Univ.

TUESDAY 26 FEBRUARY

CERN COLLOQUIUM

at 16.30 hrs - Auditorium

"Spiral Structure of Galaxies"

by K.O. Thielheim / Univ. of Kiel

THURSDAY 28 FEBRUARY

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs - Auditorium

"Hadron-Nucleus Interactions at High Energy"

by M.A. Faessler / Max-Planck Inst. Heidelberg and CERN

FRIDAY 29 FEBRUARY

CERN COMPUTER SEMINAR

at 11.00 hrs - Council Chamber

"Experience in Operating an International Network"

by K. Bearpark / IBM, Hursley, U.K.

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POUR INFORMATION / FOR INFORMATION

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VENDREDI 22 FÉVRIER

SEMINAIRE DU LAPP

à 10h30 - Amphithéâtre du LAPP

Laboratoire d'Annecy-le-Vieux de Physique des Particules, chemin de Bellevue, Annecy-le-Vieux (Haute-Savoie, France)

"Les corrections radiatives, une clé pour les particules à découvrir"

par M. Veltman / Utrecht-Lapp

Renseignements complémentaires auprès de H. Pessard / EP, tél. 6526 ou Lab. d'Annecy-le-Vieux, tél. (023) 23.32.45, int. 327.

TRAINING AND EDUCATION ENSEIGNEMENT

FEBRUARY 20 AND 22

ACADEMIC TRAINING

(Tel. 2844)

10.00 hrs / 12.00 hrs - Auditorium

"Finite Elements in the Solution of Integral Equations, Applied to 3-Dimensional Magnetic Field Problems"

by C.W. Trowbridge / Rutherford Lab.

Abstract : A general introduction to numerical techniques in electromagnetics followed by a detailed discussion of the relative merits of differential and integral methods. An attempt will be made to classify problems appropriate to integral operators with examples from magnet design drawn from high energy physics and electrical machines. Various forms of integral equations will be presented using magnetisation vectors, vector potential and scalar potentials. The derivation of computer algorithms utilizing the above functions will be discussed with particular emphasis on 3D magnetostatic problems. Basic integral formulations for eddy current problems will also be discussed illustrated with results from 2D codes. Work in progress and future research work will be briefly surveyed. Results of codes developed at Rutherford Laboratory and elsewhere will be used to illustrate the methods - including the use of interactive colour graphics and "movie films".