

SEMINARS

SEMINAIRES

Monday 19 April

ISOLDE SEMINAR

at 10.30 hrs – SC Conference Room
(Building 26/1-025)

Exploration of neutron-rich exotic Na and K isotopes at the PS

by M. Langevin / I.P.N., Orsay

The recent breakthrough towards the limit of stability of neutron-rich Na and K isotopes will be reported. A very efficient delayed-neutron detector has allowed half-life determinations and in most cases Pn-measurements in several new Na and K isotopes and in some Mg and Ca descendants. A new experimental project for a further advance towards the neutron drip-line for the elements Ne to S will be outlined.

ISR SEMINAR

at 14.30 hrs – ISR Auditorium
(Top floor of Building 30)

Molecular and cluster beams from nozzle sources : principles and applications

by U. Valbusa / Genoa

LEAR Users Meeting

at 16.00 hrs – PS Auditorium
(Building 6, 2-024)

Second LEAR Users Meeting.

EP SEMINAR

at 17.00 hrs – Auditorium

A search for charged scalar particles in e^+e^- annihilation

by S. Orito / Univ. of Tokyo

A search for unstable charged scalar particles, such as technipions and charged Higgs particles, by the JADE collaboration will be described in detail.

Tuesday 20 April

PS AND SC COMMITTEE

I – OPEN SESSION

at 09.00 hrs – Council Chamber

1. Information from the Chairman.

2. Status reports and proposals

2.1 Detection technique for proposal P53 – Study of relativistic nucleus-nucleus reactions induced by 0^{16} beams of 9-13 GeV per nucleon at the CERN PS (GSI

Darmstadt – LBL Berkeley – Heidelberg – Marburg – Warsaw; PSCC/82-1/P53; 82-9/P53 Add. 1; R. Stock).

2.2 Perturbed Angular Correlation experiment at ISOLDE (Berlin; PSCC/82-11/M99; H. Haas).

2.3 Mössbauer studies of implanted impurities in solids (Aarhus – CERN ISOLDE Coll.; PSCC/82-10/M98; G. Weyer).

2.4 Determination of the mass of the electron neutrino from studies of inner Bremsstrahlung in electron capture beta decay (Aarhus – CERN – Roskilde; PSCC/82-7/M97; B. Jonson).

3. Technical information

– Test beams and SC schedule
(B. Allardyce).

– Test beams and PS schedule
(K. Kilian).

II – CLOSED SESSION

at 14.30 hrs – Sixth Floor Conference Room.

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium *

Experimental techniques of and results from relativistic heavy ion physics

by H. Ströbele / Heidelberg University

– *Data analysis of streamer chamber pictures of collisions of 2.5 GeV/c per nucleon argon with KC1;*

– *Particle identification of positive pions, p, d, t;*

– *multiplicities, inclusive spectra;*

– *global variables and comparison with model predictions.*

* Coffee at 16.00 hrs.

Wednesday 21 April

ISR COMMITTEE

I – OPEN SESSION

at 09.30 hrs – Council Chamber

1. Status report from Experiment R 608, P. Schlein.

II – CLOSED SESSION

at 11.00 hrs – Sixth Floor Conference Room

(Administration Building)

THEORETICAL SEMINAR

at 14.00 hrs – Theory Conference Room

Glueball Spectroscopy in 4d Lattice Gauge Theories

by B. Berg / CERN

Mass gap calculations for SU(2) and SU(3) lattice gauge theories in four dimensions are reviewed. On Wilson loop operators up to length 8 all irreducible representations of the full cubic group are constructed, and excited glueball states are classified. For the gauge group SU(3) preliminary Monte Carlo results for excited glueball states are presented, and a few phenomenological implications are discussed.

Wednesday 21 April

CERN COMPUTER SEMINAR

at 16.00 hrs – Council Chamber *)

The concepts of the FORTH programming language

by Paul Bartholdi / Observatory of Geneva

The FORTH programming environment was designed in the late sixties by astronomers, to be used by astronomers for computer-controlled telescopes, data acquisition, and on-line reduction. The somewhat unusual concepts on which it is based will first be presented from both the theoretical and the user's point of view. Examples will be discussed of the human interaction with the system, the fundamental extendability of all facilities, and the basic simplicity of the implementation. Then the historic development of FORTH in the scientific, commercial, and, more recently, the consumer community will be described. Both the standardization work, culminating in the FORTH-79 publication, and the FIG (FORTH Interest Group) organization in California are highlights of this course. FORTH is now implemented on most (if not all) minicomputers and microcomputers, as well as on many large and very large machines. Applications range from very simple process control tasks to large multiuser banking, satellite image processing, or database systems. Finally a few details of the implementation will be described, with reference to microprogramming.

*) Tea and coffee will be served at 15.30 hrs.

Thursday 22 April

DD COLLOQUIUM

at 14.00 hrs - Council Chamber

Office Automation Colloquia Series

by R. Hallstein / Philips Data Systems, Zürich

The general concept of office automation in the eighties consists of the confluence of functions and new technologies. Some sophisticated office equipment is already available, other technologies are now being tested or developed in our research and development laboratories. Highlights of the presentation will be :

- data processing/word processing
- electronics archive based on digital optical recording
- image processing
- local area network
- teletex terminals
- computer output by voice.

Friday 23 April

TECHNICAL PRESENTATION

14.00 hrs/16.00 hrs – DD Auditorium
(Building 31, 3rd floor)

Digital Equipment Corporation SA (USA/CH) introduces its new low-end member of the VAX-11 family of computers – the VAX-11/730.

Language : English.

Information : M. Diraison / FI / 4585.

Monday 26 April

EF SEMINAR

at 11.00 hrs – EF Conference Room
(Building 13/2-005)

Introduction to the physics at e^+e^- and $p\bar{p}$ colliders (1)
by P. Jenni

The purpose of the two lectures is to give to the non particle physicist an elementary introduction to the exciting physics of high energy e^+e^- and $p\bar{p}$ collisions. Particular emphasis will be put on the possibilities opened up by the SPS $p\bar{p}$ collider now in action and the future LEP e^+e^- machine.

TRAINING AND EDUCATION ENSEIGNEMENT

ACADEMIC TRAINING (Tel. 2844)

Monday 19 to Friday 23 April

11.00 hrs to 12.00 hrs – Auditorium

The action of ionizing radiation on biological systems (Five lectures)

by A. Kellerer / Univ. of Würzburg

The lectures will be concerned with the biological and physical bases of radiation effects and their implications for a quantitative risk assessment. A synopsis of radiation physics and biology will be followed by a consideration of early quantitative models, such as the target theory and the more sophisticated investigations of Lea. Microdosimetry will be treated in detail with emphasis on recent developments and, in particular, certain problems of geometric probability. Radiobiological models that utilize the tools of radiation physics and of microdosimetry will be compared. The discussion will include a broad range of unsolved problems; it will also deal with general conclusions on the dose-effect and the RBE-dose relation at low doses. The final part of the lectures will focus on epidemiological methods and on available information on hereditary effects and on radiation carcinogenesis in man.