

SEMINARS SEMINAIRES

Monday 23 January

TECHNICAL PRESENTATION

LeCroy Research Systems (USA / CH) seminar

at 10.30 hrs – LEP Auditorium (bldg. 30, 7th fl.)

**Applications Information on
LeCroy Components for High Energy Physics**
by Dr. Lawrence LEVIT and Werner FARR

- MIQ401 Charge Multiplexer,
- MVV200 High Speed Precision Charge Coupled Devices,
- MVL407 Ultrafast Quad Voltage Comparator
- HQV810 Octal Hybrid Charge sensitive Preamplifier
- TRA402 Quad High Speed Chamber Amplifier,
- MLL400 Quad 250 MHz Shift Register.

Language : English

Information : M. Diraison / FI/4585

Monday 23 January

SPECIAL EF SEMINAR

at 11.00 hrs – EF Conf. Room (bldg. 13, 2-005)

Superconducting colloid as shower detector
by A.K. DRUKIER / MPI Munich

We describe the new particle detector, SSC, based on the change of state from superconducting to normal. SSC may be used as an electromagnetic shower detector with the following features :

1. density 10 - 15 g/cc
2. spatial resolution about 1 mm
3. energy resolution 1 - 5%

Other applications of SSC in high energy particles, e.g. as a live target or as a TR detector will be briefly described. The use of SSC for a superheavymagnetic monopole search is suggested.

Monday 23 January

EP SEMINAR

at 17.00 hrs – Auditorium

**Production of charmed lambda baryons
at low energies**
by H. NOWAK / CERN-EP

A charm search experiment was performed at the Serpukhov 70 GeV proton accelerator using the JINR BIS-2 spectrometer. About 200 charmed lambda baryons were found in the interactions of neutrons with carbon nuclei. Two decay modes (neutral kaon, proton, two charged pions and lambda, three charged pions) were observed. This is the first statistically significant direct observations of charmed particle production in strong interactions at these low energies. The results of the study of these charmed baryons are presented together with some

classical physical results obtained as by-products of the charm search experiment (lambda polarization, strange hyperon production diffraction dissociation of neutrons into neutral kaon plus lambda and other resonance production).

Mardi 24 janvier

PRESENTATION TECHNIQUE

de 09.00 h à 16.00 h – Parking PTT, bât. 63

Henri METZNER SA représentant LANDERT MOTOREN AG (CH) propose en démonstration le matériel de manutention Vitax-Handling (CH) Nivomat, Levomat, Tablomat, Storomat.

Langues : allemand, anglais, français

Renseignements : M. Diraison / FI/4585

Wednesday 25 January

PS SEMINAR

at 11.00 hrs – PS Auditorium (bât. 6, 2-024)

The ACOL Project

by E. JONES

The accumulation rate of antiprotons is to be increased up to 6×10^{10} antiprotons/hour by installing an anti-proton collector ring around the present AA. The new ring is described along with its planned construction programme.

Wednesday 25 January

THEORETICAL SEMINAR

at 14.00 hrs – TH Conf. Room

The relativistic string model and the quantum Liouville theory

by A. NEVEU / CERN

The relativistic string of the old dual-resonance model can be quantized in space-time dimension $D \geq 26$, by Polyakov's procedure. An exact quantum solution of the two-dimensional Liouville theory is necessary to obtain the new, improved, Veneziano amplitudes. Unusual and remarkable features of this quantization will be described.

Friday 27 January

INTERSECTING STORAGE RINGS COMMITTEE

at 09.00 hrs – Auditorium

OPEN MEETING

**The ISR physics programme and latest results
by ISR physicists**

(at 14.30 hrs – 6th floor Conf. Room of the Main Building – Closed Meeting)

at 15.30 hrs – Auditorium

SPECIAL FINAL SESSION

**The ISR and accelerator physics –
by K. JOHNSON**

The role of the ISR in the development of particle physics

by M. JACOB

Concluding remarks

by H. SCHOPPER

Monday 30 and Tuesday 31 January

PROTON SYNCHROTRON AND SYNCHRO-CYCLOTRON COMMITTEE

Open Session

Monday 30 January at 14.00 hrs – Council
Room
(continuing on Tuesday 31 January starting at
09.00 hrs)

1. Information from the Chairman.

2. Progress reports on the following experiments :

PS 179 Study of the interaction of low-energy anti-protons with H^2 , He^3 , He^4 , Ne-Nuclei using a streamer chamber field (Dubna - Frascati - Padova - Pavia - Torino; PSCC/83-34/M164; 83-35/P17 Add. 3; 83-36/P17 Add. 4; G. Piragino).

PS 172 $p\bar{p}$ total cross-sections and spin effects in $p\bar{p} \rightarrow K^+K^-$, $\pi^+\pi^-$, $p\bar{p}$ above 200 MeV/c (Amsterdam NIKHEF-Geneva - QMC London - Surrey - Trieste; D. Bugg).

PS 173 Measurement of antiproton-proton cross-sections at low antiproton momenta (Heidelberg MPI - Heidelberg Univ.; T. Walcher).

PS 161 Search for strongly bound states of the $p\bar{p}$, antiproton-deuteron and antiproton(NN...) systems (Basel - Karlsruhe - Stockholm - Strasbourg - Thessaloniki), and

PS 182 Investigations on Baryonium and other rare $p\bar{p}$ annihilation modes using high-resolution π^0 spectrometers (Basel-Stockholm-Thessaloniki; L. Tauscher).

3. Report of the PS Coordinator.

4. Progress report on PS 188, Measurement of channelling radiation and its polarization and X-ray excitation, together with deviations from Landau distributions (Aarhus - CERN - Strasbourg; PSCC/83-54/MI73; E. Uggerhoj).

5. ISOLDE proposals :

- Studies of stable octupole deformations in theadium region (Bergen - Göteborg - Mainz; PSCC/83-42/P72; 83-43/S72; G. Lovhoiden).

- Study of particle unstable states in 9Be by time-of-flight spectroscopy of beta-delayed neutrons from 9Li (Aarhus - CERN - Darmstadt - Göteborg; PSCC/83-44/73; 83-45/73; G. Nyman).

6. Report of the SC Coordinator.

Closed session

Tuesday 31 January at 14.30 hrs – 6th floor Conf.
Room, Main Bldg.

Monday 30 January

EP SEMINAR

at 17.00 hrs – Auditorium

Results on hard-scattering-processes in two photon interaction at the PLUTO detector at PETRA

by J. BÜRGER / DESY and CERN-EP

Recent results of the two photon analyses of the data ta-

ken at c.m. energies of about 35 GeV will be presented.
The talk covers results on

- (i) QED-processes,
- (ii) hadron production and its interpretation in terms of the photon structure function and
- (iii) high transverse momentum phenomena.

Tuesday 31 January

SPS EXPERIMENTS COMMITTEE

Open session

at 09.00 hrs – Auditorium

1. Status Report on NA10 (High Resolution Study of the Inclusive Production of Massive Muon Pairs by Intense Pion Beams; L. Kluberg).
2. Status Report on WA69 (Photoproduction in the Energy Range 70-200 GeV; E. Paul).
3. Status Report on WA70 (Study of Direct Photon Events in Hadronic Collisions; M. Martin).
4. Status Report on WA71 (An Experiment to Study Beauty Production and Lifetime in the Upgraded Omega Prime Spectrometer; G. Diambri-Palazzi).
5. Status Report on WA75 (An Experiment to observe Directly Beauty Particles Selected by Muonic Decay in Emulsion and to Estimate their Lifetime; P. Musset).
6. Status Report on UA4 (Measurement of the Elastic Scattering and Total Cross-Section at the Sp $\bar{p}$ S Collider; M. Haguenauer).
7. Measurement of the Real Part of the Elastic Scattering Amplitude at the Collider (UA4-Collaboration : M. Haguenauer; SPSC 84-7/P 114/Add.3).
8. Test of the Feynman Scaling of the Fragmentation Region in the Proton and Antiproton Collisions at 540 GeV (Beijing - Fujisawa - Hiroaki - Kobe - Tokyo - Urawa - Utsunomiya - Yokohama Collaboration; Y. Muraki; SPSC 82-25/P. 179).
9. Proposal to Measure the Ratio $\sigma_v(NC)/\sigma_v(CC)$ with High Precision (CHARM Collaboration; J. Panman; SPSC 84-1/P 194).

CLOSED SESSION

Tuesday 31 January

at 16.00 hrs – Room A+C

(To be continued on Wednesday 1 February,
at 09.00 hrs, in Sixth Floor Conference Room,
Administration Building.)

Thursday 2 February

SPECIAL COMPUTER SEMINAR

at 10.00 hrs – TH Conf. Room

Converting 7600 jobs to the Cyber 875

by I. McLAREN and M. DRAPER / CERN