



SEMINARS SEMINAIRES

Monday 23 August

ISOLDE EXPERIMENTS COMMITTEE

Open session

Monday 23 August
at 14.00 hrs – Council Chamber

1. *Introductory remarks by the Chairman.*
2. *Status report on separator and beamline.*
3. *Coordinator's report.*
4. *Proposal: Shape coexistence and shell-model intruder states in the lead region studied by alpha decay (Institut voor Kern- en Stralingsfysica, K.U. Leuven); ISC 93-17/P49; P. Van Duppen.*
5. *Proposal: Saturation of deformation and identical bands in very-neutron rich Sr Isotopes (Department of Physics, Jyväskylä-Kernchemie Mainz-Isolde Collaboration); ISC 93-23/P52; G. Lhersonneau.*
6. *Proposal: Single-particle states in ^{133}Sn (Strasbourg-Studsvik-Oslo-Göteborg-Mainz-Warsaw-Lyon-Bergen Collaboration); ISC 93-25/P53; P. Hoff.*
7. *Proposal: Mass measurement of very short half-lived nuclei (Aarhus-Bucharest-CERN-Giessen-Göteborg-Mainz-Montreal-Orsay Collaboration); ISC 93-27/P54; M. de Saint Simon.*
8. *Proposal: Towards the proton drip-line along the cadmium isotopic chain (Warsaw-CERN); ISC 93-28/P55; P. Van Duppen.*

Closed session

Monday 23 August
after the Open Session, 6th Floor, Main Building,
continuing on Tuesday 24 August from 10.00 hrs
if necessary

Tuesday 24 August

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium*

A summary of the Marseille EPS Conference :
Part 1 : Results from hadronic machines.

by Michel DELLA NEGRA / CERN-PPE

* Tea & coffee will be served at 16.00 hrs.

Wednesday 25 August

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Cosmic ray signatures of multi-W processes

by Andreas RINGWALD / CERN

We (D.A. Morris and A. Ringwald) explore the discovery potential of cosmic ray physics experiments for Standard Model processes involving the non-perturbative production of $\sim O(\alpha_W^{-1}) \approx 30$ weak gauge bosons. We demonstrate an experimental insensitivity to proton-induced processes and emphasize the importance of neutrino-induced processes. The Fly's Eye currently constrains the largest region of parameter space characterizing multi-W phenomena if a cosmic neutrino flux exists at levels suggested by recent models of active galactic nuclei. MACRO (DUMAND) can constrain or observe additional regions by searching for 1-100 (1-10) characteristic near-vertical (near-horizontal) spatially compact energetic muon bundles per year.

Wednesday 25 August

ISOLDE SEMINAR

at 16.00 hrs – TH Conference Room

Exotic nuclei and the puzzle of the isotopic anomalies in meteorites

by Wolfgang HILLEBRANDT / MPI für
Astrophysik, Garching

Certain high-temperature condensates found in primitive meteorites show considerable enhancements of neutron-rich isotopes such as ^{48}Ca , ^{50}Ti and ^{54}Cr , sometimes correlated with r-process overabundances. It is likely that these anomalies are of nuclear origin. Based on experimental data recently obtained at GANIL and on new theoretical estimates of several relevant reaction rates, an attempt is made to develop a consistent astrophysical model. Still existing problems related to some of the nuclear physics data are discussed.

Friday 27 August

MEETING ON PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room

CP violation in hyperon decays – an update

by Herbert STEGER / Albert-Ludwigs-Universität,
Freiburg, Germany

Hyperon decays are a place to look for direct CP violation. I will review the relevant CP-violating observables and give estimates within the standard model. Dependence on the top

quark mass, as well as recent bounds on the CKM angles will be discussed. Uncertainties associated with the evaluation of the hadronic matrix elements are estimated by comparing different models.

Monday 30 August

PPE SEMINAR

at 16.30 hrs – Auditorium

Recent results from the Crystal Barrel

by N.P. HESSEY / CERN

The Crystal Barrel experiment uses low energy antiproton-nucleon annihilation to study the strong interaction in the non-perturbative region. The main goals are understanding the $q\bar{q}$ meson spectrum in the 1 - 2 GeV mass range, finding non- $q\bar{q}$ mesons (glueballs, hybrids, $K\bar{K}$ molecules), and probing $\bar{p}N$ annihilation dynamics. We will report recent results, especially in the $J^P = 0^+$ meson sector; also in eta decays which give a test of chiral perturbation theory; and radiative decays which test the vector meson dominance model. Preliminary pictures from in-flight annihilations will be shown, followed by a summary of future plans for the experiment.

Tuesday 31 August

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium

A Summary of the Marseille EPS Conference

Part 2 : Results from e^+e^- machines

by Jorg WOTSCHACK / CERN-PPE

Wednesday 1 September

TECHNICAL PRESENTATION

14.30–16.00 hrs – Council Chamber

The NEWTON MessagePad, the first in a family of communication assistants from Apple

by G. DOLF / Industrade AG (CH)

Language : English

Information : M. Diraison / FI / 4585

Thursday 2 September

DETECTOR R & D COMMITTEE

Open session

Thursday 2 September

at 09.00 hrs – Auditorium

1. *Introductory remarks* (W. Hoogland, M. Turala)
2. RD-8 Status Report: Development of GaAs detectors for physics at the LHC (RWTH Aachen–Bologna–CERN–Florence–Albert Ludwigs Univ. Freiburg–Glasgow–Lancaster–RAL–Sheffield–ANSTO Sydney; DRDC 93-37; C. del Papa).

3. RD-18 Status Report: A study of new fast and radiation hard scintillators for calorimetry at LHC (CALTECH–CERN–DAPNIA Saclay–INFN Ancona–INFN Roma–IFA Bucharest–IP Praha–IPNL & LPCML Univ. Claude Bernard Lyon–LAPP Annecy–LLNL Livermore–Lund–Petersburg Nuclear Phys. Inst. St. Petersburg–RWTH Aachen–Tata Inst. Bombay; DRDC 93-31; P. Lecoq).
4. RD-20 Status Report: Development of high resolution Si strip detectors for experiments at high luminosity at the LHC (Bonn–Comenius Univ. Bratislava–Cambridge–CERN–INP & INPT Cracow – NCSR Demokritos Athens–SEFT Helsinki–Liverpool–Brunel London–Imperial College London–CPPM Marseille–Oslo–SI Oslo–INFN Padova–INFN Rome Sanita–RAL–LEPSI Strasbourg–INFN Turin–IHEP Vienna–PSI Villigen–Yale; DRDC 93-30; G. Hall).
5. RD-23 Status Report: Optoelectronic analogue signal transfer for LHC detectors (Birmingham–CERN–Ecole Polytech. Fed. Lausanne–Imperial College London–Lund–Oxford–RAL–Marconi Defence Systems Stanmore; DRDC 93-35; G. Stefanini).
6. RD-26 Status Report: Development of a large area advanced fast RICH detector for particle identification at the LHC operated with heavy ions (Bari INFN & Politecnico–CERN–Coimbra–Ecole Polytechnique Palaiseau–EPF Lausanne–Giessen–Lund–Munich TU–Padova–Weizmann Inst. Rehovot–Rudjer Boskovic Inst. Zagreb; DRDC 93-36; F. Piuze).
7. RD-27 Status Report: First-level trigger systems for LHC experiments (Birmingham–CERN–Heidelberg–Linköping–MPI Munich–Queen Mary & Westfield College London–Royal Holloway & Bedford New College London–La Sapienza Rome–RAL–Stockholm; DRDC 93-32; N. Ellis).
8. RD-28 Status Report: Development of micro-strip gas chambers for radiation detection and tracking at high rates (CERN–BINP Novosibirsk–CRN Strasbourg–CRPP Ottawa–DAPNIA Saclay–Torino–FPNT Cracow–IIIHE Bruxelles–INP IME Demokritos–IP Prague–IP Bratislava–IP Kosice–IPN Lyon–ISA Aarhus–ITEP Moscow–JINR Dubna–LIP Coimbra; DRDC 93-34; F. Sauli).
9. Proposal: Shashlik calorimetry. A combined shashlik + preshower detector for LHC (Ecole Poly. Palaiseau–CERN–JINR Dubna–ITEP, Russia–IHEP Protvino–INR Moscow–LIP Lisboa–Imperial College London–RAL–Brunel Uxbridge; DRDC 93-28/P50; L. Dobrzynski).

Closed session

Thursday 2 September

following the Open Session, continuing on

Friday 3 September

at 09.00 hrs, 6th floor Conference Room