

SEMINARS SEMINAIRES

MONDAY 9 JULY

EP SEMINAR

at 17.00 hrs - Auditorium

"Direct photon production at the ISR"

by P. Mouzourakis / CERN

Abstract : A signal for direct photon production in proton-proton collisions at the ISR has been observed by experiment R806, an Athens/Brookhaven/CERN/Syracuse Collaboration, using lead-liquid argon calorimeters. This is of relevance to the study of the interactions of hadronic constituents and could provide a basis for distinguishing among different models of large transverse momentum phenomena. Preliminary results on the magnitude, P_T and $\sqrt{s}$ dependence of the signal will be presented.

TUESDAY 10 JULY

CERN PARTICLE PHYSICS SEMINAR

at 16.00 hrs - Auditorium (*)

"Parity non-conservation in atoms and the Weinberg-Salam model"

by E.D. Commins / Univ. of California, Berkeley

Abstract : A review of current status of atomic parity violation experiments, a detailed discussion of the Berkeley experiment on thallium, and a brief discussion of possible future developments.

(*) Note : Those attending this seminar are cordially invited to the Salle des Pas Perdus (just outside the Council Chamber) at 15.30 hrs to meet the speaker and for informal discussions. Tea and coffee will be provided.

TUESDAY 10 AND WEDNESDAY 11 JULY

SPECIAL DD SEMINARS

at 11.00 hrs - Theory Conference Room

"Introduction to algebraic computing using REDUCE"

by A.C. Hearn / Univ. of Utah

Abstract : REDUCE is a computing language for general algebraic manipulation (including symbolic integration) in addition to the more usual numerical calculations handled by conventional programming languages. This series of two lectures will treat the practical aspects of using REDUCE, with special emphasis on applications of interest to high-energy physicists. No previous knowledge of REDUCE or any other programming language is required. If there is sufficient interest, additional lectures will be arranged on more advanced aspects of algebraic and symbolic computing.

WEDNESDAY 11 JULY

ISR COMMITTEE

I. Open Session

at 9.30 hrs - Council Chamber

1. Information from the Research Director-General, L. Van Hove.
2. Report on the status of analysis of experiment R 606, New Particle Production at Forward Angles, K.L. Giboni.
3. Requested continuation of experiment R 209, High Mass Muon Pairs and Associated Hadrons, W. Toki.
4. Presentation of Proposal P 102, Precise Measurement of the Proton-Antiproton Total Cross-Section at the CERN ISR, (CERN-MIT-Pisa-Stony Brook), T. Del Prete.
5. Presentation of Proposal P 103, Measurement of the pp Total Cross-Section at the CERN ISR (Amsterdam-Louvain-Northwestern), D. Favart.

II. Closed Session

at 14.00 hrs - 6th Floor Conference Room (Administration Building)

THURSDAY 12 JULY

ESO ASTROPHYSICS SEMINAR

at 14.00 hrs - ESO Conference Room (Building 593)

"Distribution of Quasars and Radio Galaxies through Space : A Summary"

by J. Wall / Cavendish Lab. - Cambridge

Abstract : It is now apparent that different classes of quasars and radio galaxies exist, each with a distinctive cosmic history. The evidence - from V/Vmax tests and counts of radio sources - is summarized and some implications, physical and cosmological, are briefly noted.

CERN COLLOQUIUM

at 16.00 hrs - Auditorium (*)

"Production of free quarks in the early universe"

by R.V. Wagoner / Stanford Univ.

Abstract : A general model of the $q\bar{q}$ interaction which avoids complete confinement is employed to calculate the number of free quarks which survive from the early universe. For a free-quark mass $M > 10$ GeV, our results are fundamentally different from those of previous calculations. Quarks of such mass freeze out of equilibrium during the quark-hadron transition at a temperature $0.2 < T < 0.4$ GeV/k, which predicts $15 < M \lesssim 30$ GeV if the present quark/nucleon ratio is $\sim 10^{-20}$.

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