

SEMINARS SEMINAIRES

MONDAY 21 JANUARY

EP SEMINAR

at 17.00 hrs (*) - Auditorium

"Ionisation : Deep inelastic scattering from atoms"

by W.W.M. Allison / Oxford Univ.

Abstract : The cross-section of the inelastic scattering of relativistic charged particles by atoms is derived using classical Maxwell field theory. The cross-section is given uniquely in terms of the generalized dielectric constant, $\epsilon(k, w)$, which is usually expressed in terms of $f(k, w)$, the generalized oscillator strength. $f(k, w)$ is simply the structure function of the atoms and obeys the familiar sum rule :

$$\int f(k, w) dw = 1.$$

Using a simple relation between $f(k, w)$ and the known photo-absorption cross-section, the ionisation cross-section may be calculated. The cross-section for argon is evaluated and some simple features relevant to the design of relativistic dE/dx detectors are pointed out.

(*) Please note change of time !

TUESDAY 22 AND WEDNESDAY 23 JANUARY

PS AND SC COMMITTEE

- Open Session - Tuesday 22 January
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at 9.00 hrs and 14.30 hrs / Council Chamber

1) Status reports :

- PS 159 Strange dibaryon systems (Rome-Saclay (CEN)-Vanderbilt; PSCC/79-44/M33.; E. Pauli).
- PS 160 Measurement of A and R parameters in the reaction $\pi^+p \rightarrow K^+\Sigma^+$ (Edinburgh-Rutherford-London (Westfield College); PSCC/79-51/M39; P. Litchfield).
- PS 161 Search for strongly bound states of the pp, pd and p (NN...) states (Basel-Karlsruhe-Stockholm-Thessaloniki; PSCC/80-2/M44; H. Koch).
- PS 164 The influence of channelling on atomic and nuclear reaction yields (Aarhus-CERN-Strasbourg; E. Uggerhøj).
- PS 165 Measurement of the K^-p scattering length at threshold by observation of kaonic hydrogen X-rays from a condensed target (Birmingham-Rutherford-Surrey; PSCC/79-45/M34 and 80-1/M43; C. Batty).
- SC 63 Elastic scattering of μp and μd muonic atoms against protons and deuterons (Bologna (INFN and Univ.); A. Bertin).

- SC 74 Measurement of the population and lifetime of the 2S state of muonic hydrogen (Pisa (INFN and Univ.); PSCC/80-3/M45; G. Carboni).
- SC 78 Radiobiological experiments using the SC 600 MeV neutron beam (CERN-CNEN-Manchester; PSCC/80-4/M46; M. Bianchi).

- 2) SC Coordinator's report on the SC programme - 1979/80 (H. Ravn);
PS Coordinator's report on the PS programme - 1979/80 (P. Baillon).
- 3) Addendum to Expt. SC 83 : Study of the particle production in ^{12}C induced heavy ion reactions at 86 MeV/N (CERN-Copenhagen-Grenoble-Lund; PSCC/79-42/Add. to PSCC/78-8/P1; P. Jakobsson).
- 4) Status of preparation of LEAR project :
i) Machine studies; ii) Overview of Letters of Intent for experiments.

- Closed Session - Wednesday 23 January
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at 9.00 hrs / Sixth Floor Conference Room
(Administration Building)

WEDNESDAY 23 JANUARY

THEORETICAL SEMINAR

at 14.00 hrs - Theory Conference Room

"Some aspects of a technicoloured world"

by M.E. Peskin / Harvard-Saclay

THURSDAY 24 JANUARY

ESO ASTROPHYSICS SEMINAR

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

"Proto Planetary Nebulae observed with IUE"

by H. Nussbaumer / ETH, Zürich

CERN COLLOQUIUM

at 16.30 hrs - Auditorium (*)

"Twin-jets from the centres of galaxies"

by W. Kundt / Inst. of Astronomy, Bonn Univ.

Abstract : The long-standing astrophysical riddles of quasars, BL Lac-type objects (=blazars), Seyfert galaxies, and huge extra-galactic radio sources are likely to find a common explanation - namely as (largely non-thermal) sources powered by the nucleus of an active galaxy. Even 'normal' galaxies like our own show similar nuclear activity. In particular, many if not all galactic centres emit a pair of antipodal beams which may consist of extremely relativistic ($\gamma \gtrsim 10^3$) electrons and positrons, and which blow radio-emitting bubbles (lobes) into the intergalactic medium. The largest among them are cosmic weather vane whose unprojected length can exceed 10^7 lightyears.

(*) Note : Those attending this colloquium 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.

MONDAY 28 JANUARY

ISR SEMINAR

at 14.30 hrs - ISR Auditorium
(Top floor of Bldg.30)

"Possible use of the intense beam of a big
proton accelerator to excite a linear acce-
lerator structure"

by E. Perevedentsev / Novosibirsk

EP SEMINAR

at 17.00 hrs - Auditorium

"Putting positrons to work"

by A. Jeavons / CERN

TUESDAY 29 JANUARY

CERN COMPUTER SEMINAR

at 11.00 hrs - Council Chamber

"The Ada Language - an overview"

by V. Stenning / Systems Designers Ltd.,
England

MERCREDI 30 JANVIER

SEMINAIRE PS

à 11h00 - Amphithéâtre PS (Bât.6)

"Installation-pilote pour récupération de
chaleur"

par L. Danloy

TRAINING AND **EDUCATION** **ENSEIGNEMENT**

JEUDI 24 JANVIER

ENSEIGNEMENT GENERAL (Tél. 2844)

de 13h00 à 13h30 - Amphithéâtre

"Science pour Tous"

par R. Carreras

MONDAY 21, WEDNESDAY 23 AND THURSDAY 24 JANUARY

ACADEMIC TRAINING (Tél. 2844)

at 11.00 hrs - Auditorium

"QCD and deep inelastic processes"
(Lectures 4 to 6)

by G. Altarelli / Univ. of Rome

JANUARY 29 AND 31

FEBRUARY 5 AND 7

ACADEMIC TRAINING

at 11.00 hrs - Auditorium

"Finite difference and finite element
methods for field computations in non-
linear and anisotropic media"

by C. Iselin / CERN

(For abstract, see notices and next week's
Bulletin.)

INFORMATIONS **GENERALES** **GENERAL INFORMATION**

L'APPRENTISSAGE AU CERN

- Comme chaque année, le CERN engagera 5 apprentis
au total, soit 2 ou 3 dans chacun des métiers
suivants :
 - Employé de Laboratoire en Physique (durée 3 ans)
 - Mécanicien-Electronicien (durée 4 ans).
- L'apprentissage au CERN est régi par les lois et
règlements en vigueur dans le canton de Genève.
En cas de réussite à l'examen de fin d'apprentis-
sage, les apprentis obtiennent le Certificat
Fédéral de Capacité suisse.
- Minima requis pour faire acte de candidature :
 - avoir 15 ans révolus à la date d'entrée en
apprentissage (1er septembre),
 - avoir terminé la scolarité obligatoire,
 - résider en Suisse ou en zone frontalière,
 - être ressortissant d'un pays-membre du CERN.
- Date de clôture des candidatures : 25 MARS.
- La Sélection (test d'entrée, entrevue, stages
pratiques) a lieu en AVRIL.
- Les apprentis sont engagés (contrats signés)
en MAI.
- L'apprentissage débute le 1er SEPTEMBRE.
- En règle générale, le CERN n'engage pas ses
apprentis directement après la fin de leur
apprentissage.
- Les personnes ayant des enfants désirant faire
un apprentissage dans ces métiers, au CERN,
sont priées de se mettre en rapport le plus
tôt possible avec le Service de l'Enseignement
(Tél. 2460 ou 2844), afin d'obtenir tous les
renseignements nécessaires ainsi que les Bro-
chures d'Information et la Formule de Candidature.
- Tous renseignements sur les apprentissages dans
le canton de Genève peuvent être obtenus auprès
de l'Office d'Orientation et de Formation Pro-
fessionnelle, 6 rue Prévost-Martin, 1211 Genève
4 - (Tél. 20.86.55).

Mme M. Viader /
Secrétariat des Apprentissages /
Division PE - Tél. 2844