

SEMINARS SEMINAIRES

Monday 15 June

EF SEMINAR

at 11.00 hrs – EF Conference Room
bldg 13, 2-005

Calibration scheme for the OPAL jet chamber by the use of laser beams

by H. BREUKER / Physikalisches Institut,
Universität Bonn

The calibration scheme for the OPAL central tracking chamber will be explained. Special attention will be given to our strategy on the application of UV laser beams for that purpose. We will give the present status of the laser system and discuss results achieved with the jet chamber full scale prototype.

Monday 15 June

EP SEMINAR

at 16.30 hrs – Auditorium

New results from the UA4 experiment

by Denis BERNARD / Ecole Polytechnique,
Paris

Two new results from the UA4 experiment at the SPS collider are presented :

- i) the process of single diffraction dissociation was studied. The cross-section is found to rise with energy slower than the total and the elastic cross-sections.*
- ii) elastic scattering was studied in the region of the Coulomb interference. A measurement of the ratio of the real to the imaginary part of the forward hadronic amplitude is reported and the implications on the higher energy behaviour of the total cross-section are discussed.*

Mardi 16 juin

PRESENTATION TECHNIQUE

09.00-11.15 : Prévessin, bus près du bât. 867

11.45-15.00 : Meyrin, bus près du bât. 63

KNÜRR AG (D/CH) propose en exposition démonstration : armoires 19" en alu, en acier – châssis de labo 19" – armoires 25" avec ou sans cadre pivotant 19" – pupîtres de commande ou régie en modules 19" – carters 19" – châssis pour carte simple ou double Europe – places de travail et agencement de labo – outillage pour l'électronique – systèmes de refroidissement en racks 19" – boîtiers non normalisés en alu, acier ou plastique – pupîtres de table – réglettes de prises 220 V ou téléphones – boîtiers pour floppy ou terminaux – places de travail pour PC – coffres de transport en alu – chariots de labo

+ RANK DESIGN (CH) : pupîtres et construction en profilés d'aluminium selon spécifications clients

+ ELDON (S) : programme d'armoires et coffrets pour courant fort

+ VU DATA (USA) : appareil à tester des composants
+ ZERO Corp. : boîtiers en alu embouti, valises et coffres de transport.

Langues : allemand, anglais, français

Renseignements : M. Diraison / FI / 4585

Tuesday 16 June

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium*

The role of diquarks in hard pp collisions

by T. LOHSE / CERN-EP

The possibility of diquark substructures inside the proton has been discussed in detail during the last decade. Various experimental tests have been proposed. In 1983, data taken with the Split Field Magnet (SFM) detector at the ISR indicated for the first time the dominance of hard diquark scattering as a source of high- p_T protons. This result may have important consequences on the interpretation of structure functions. The consistent picture emerging from the analyses of the SFM data will be reviewed. Several diquark models will be discussed and compared to the data.

* Tea and coffee will be provided at 16.00 hrs.

Mercredi 17 juin

PRESENTATION TECHNIQUE

de 09.30 à 16.30 h – bât. 73, 2-027

MKS (USA/F) propose en démonstration : – étalon de transfert : ensemble de mesure de basse pression constitué par un capteur capacitif de pression de gaz – ensemble complet de mesure et régulation de pression : une chambre à vide dont la pression est mesurée avec un capteur et régulée à l'aide d'une boucle et d'une vanne associée, dans cette chambre des gaz sont introduits grâce à des débitmètres massiques – régulateurs de jauges à ionisation de 10^{-3} à 10^{-9} Torr – vannes solénoïdes de régulation proportionnelle – capteurs capacitifs différentiels – système électronique à micro-processeur permettant de contrôler des débits gazeux et des pressions, de mesurer un taux de fuite, de tester l'efficacité de pompage – électroniques d'affichage à seuils – électroniques avec régulateurs PID (proportionnel, intégral, dérivé).

Langue : français

Renseignements : M. Diraison / FI / 4585

Wednesday 17 June

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

1P_1 states of heavy quarkonia

by YU PING KUANG / TRIESTE

Wednesday 17 June

DD SEMINAR

at 16.00 hrs – DD Auditorium
bldg 31, 3-005

Coding for the Cray X-MP using CFT77. An introduction

by M. METCALF / CERN-DD

Data processing in HEP is about to move into the era of vector processing. The purpose of this talk is to introduce the field to those who have little idea of the implications, using as a model the hardware and compiler to be installed at CERN this autumn.

Thursday 18 June

PRESENTATION

at 10.00 hrs – DD Amphitheatre
bldg 31, 3-005

Transputer evaluation systems

by John BRIERLY / Manager, Transputer
Products Division, Sension Ltd.

- General introduction to transputer and Occam
 - Presentation of SENSION's evaluation system TES
 - Demonstration of hardware products.
- There will be an opportunity to discuss additional points with the technical staff.*

Thursday 18 June

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium*

Prospects for detecting dark matter particles

by B. SADOULET / Department of Physics,
Berkeley

More than 90 per cent of the mass in the Universe is not radiating electromagnetic waves. Although there is intense controversy on the nature of this dark matter, the hypothesis that it is made of (e.g. supersymmetric) particles not yet discovered is natural in particle physics. It turns out that this hypothesis can be tested nearly unambiguously. I will describe the searches being started in Berkeley, using both conventional techniques and new cryogenic detectors.

* Tea and coffee will be provided at 16.00 hrs.

Monday 22 June

EP SEMINAR

at 16.30 hrs – Auditorium

A measurement of the spin dependent structure function G_1 of the proton by EMC

by Vassili PAPAVALASSIOU / Yale

The NA2 experiment at CERN has measured the spin asymmetry in deep inelastic muon-proton scattering using a polarized beam and a polarized target. A positive asymmetry was observed in agreement with expectations from the quark-parton model and with previous results from SLAC. The measurement was extended down to the previously unexplored x-Bjorken range of 0.01 – 0.1 allowing a more precise determination of the integral of the spin dependent structure function G_1 . The obtained

value for this integral is 0.113 ± 0.012 (stat.) ± 0.025 (syst.), in disagreement with the Ellis-Jaffe sum rule. Implications are discussed.

Tuesday 23 June

CAS ACCELERATOR SEMINAR

at 14.30 hrs – LEP Auditorium
bldg 30, 7th floor

E778, the SSC/Tevatron non-linear dynamics experiment

by S. PEGGS / LBL

Tuesday 23 June

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium

Heavy quark decays, mixing, and CP noninvariance

by Ling-Lie CHAU / Department of Physics,
University of California, Davis

Wednesday 24 June

LEP SEMINAR

at 14.30 hrs – LEP Auditorium
bldg 30, 7th floor

Generation and distribution of RF power in the LEP Main Ring

by H. FRISCHHOLZ / CERN-LEP

Friday 26 June

CAS ACCELERATOR SEMINAR

at 14.30 hrs – Auditorium

The interdependence of parameters for a TeV linear collider

by R. PALMER / BNL

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16, 17, 18 and 19 June

11.00 hrs to 12.00 hrs – Auditorium

Lattice gauge theories

by R. PETRONZIO / Max-Planck Institute,
Munich and

G. MARTINELLI / CERN-TH

Lectures 1 & 2 by R. Petronzio

Lectures 3 & 4 by G. Martinelli