

Friday 12 June

FORTY-FIRST PLENARY ECFA MEETING

at 09.00 hrs – Council Chamber

1. *Approval of the Draft Minutes of the Fortieth Plenary ECFA Meeting*
(Document ECFA/87/105/Draft)
2. *Approval of the Draft Agenda*
(Document ECFA/87/106)
3. *Chairman's report*
4. *Next ECFA Chairman (Closed session)*
5. *The HEP Programme in the USA (C. Quigg)*
– to be confirmed
6. *CERN Scientific activities and budget estimates 1988-1991 (H. Schopper)*
7. *Progress of HERA*
8. *Any other business.*

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.*

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

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.

TRAINING AND

EDUCATION

ENSEIGNEMENT

ACADEMIC TRAINING

Tel. 2844-3364

11 and 12 June

11.00 hrs to 12.00 hrs – Auditorium

**Interaction of electrons with materials
and fields**

by K. POTTER / CERN-TIS

16, 17, 18 and 19 June

11.00 hrs to 12.00 hrs – Auditorium

Lattice gauge theories

by G. MARTINELLI / CERN-TH and
R. PETRONZIO / Max-Planck Institute,
Munich

Lectures 1 & 2 by R. Petronzio

Lectures 3 & 4 by G. Martinelli

The first two lectures are a general introduction to the field, aiming mainly to discuss the basic concepts. The third and fourth lectures are devoted to lattice QCD with fermions. The problems arising when one puts fermions on the lattice are discussed with particular attention to the chiral properties of the theory. A brief résumé of the status of hadron spectroscopy is presented. Phenomenology with lattice QCD : the computation by numerical techniques of elastic form factors and structure functions of hadrons is discussed and the latest results are given. We also present the most recent attempts to calculate the hadronic matrix elements of the weak Hamiltonian ($\Delta I = 3/2$ and $1/2$ amplitudes and ϵ'/ϵ). An outlook on future developments is also given.