#### AC DESIGN GROUP

## SUMMARY RECORD OF THE MEETING HELD ON 19 JULY 83

Present : B. Autin, J.R. Bennet, N. Chohan, M. Conté, T. Dorenbos, S.X. Fang,

M. Guo, W. Hardt, H. Horisberger, C.D. Johnson, H. Jones, M. Martini,

L. de Menna, F. Pedersen, T.R. Sherwood, A. Sullivan, L. Thurndahl,

H. Umstäter, V. Vaccaro, S. van der Meer, B. Williams,

E.J.N. Wilson (chairman).

#### 1 - OPENING REMARKS

a) As Dr. S.X. Fang was attending his last AC meeting prior to returning to Peking, the chairman paid tribute to the hard work contributed by Dr. Fang to the lattice design. His replacement Dr. Guo was introduced and welcomed to the meeting.

In reply Dr. Fang thanked all concerned for the close collaboration enjoyed during his year at CERN.

- b) AC Status: The chairman reported that Dr. G. Brianti will be putting forward a possible 3 phase AC construction programme:
  - 1. Targets; Injection line; Lithium lens.
  - 2. AC lattice; Magnets; RF Transfer.
  - 3. Cooling systems AC and AA.

It was felt that for 1. and 2. approval would be sought but for 3. the design should be studied in detail to investigate bunch rotation alone as an alternative to introducing, in the first instance, transverse cooling techniques.

### 2 - LATTICE

S.F. Fang compared recent lattice 83.04, 05, 06 parameters as well as the latest 83.07, which he showed was stable. It was seen that further study might

benefit 83.07 but in the meantime 83.07 which used a magnet field strength of 1.6 T would be adopted as the reference lattice.

### 3 - DESIGN REPORT

- a) The summer vacation period explained the limited response to the Design Report chapter preparation but it was stressed that all final chapters of this report must be submitted by the AC Design Group meeting of Sept. 7th with publication target date 30th Sept. 1983.
- b) Magnet Design Report: The magnet design status was reported by J. Bennet.

  He was asked to contact E. Jones or F. Malthouse for vacuum chamber details,
  and L. Coull for power supply requirements.

  Further to the latest lattice decision, Rutherford were asked to study its
  implications on magnet design and power supply requirements.

# 4 - NEXT "INTERNATIONAL" MEETING

- 16 August 1983.
- 7 Sept. 1983.

These meetings will start at 9.00 in the large PS Conference room.

B. Williams.

# Distribution:

AC Design Group List.