LISTE DES RAPPORTS - DIVISION TC
(janvier - juin 1971)

PHYSICS

Analysis of the annihilation process \( \bar{p}p \rightarrow n^+\pi^- \) at rest using Veneziano-type amplitudes
S.U. Chung, L. Montanet, S. Reucroft, and O. Witt-Hansen,
CERN-Collège de France Collaboration

Direct measurement of helicity amplitudes \( n^+p \rightarrow K^+\pi^+ \) and \( K^-p \rightarrow n^-\pi^+ \)
(B. Sadoulet)
CERN, Collège de France,
Ecole Polytechnique, Orsay

Test of helicity conservation in the reaction \( K^+p \rightarrow Q^+p \)
(Data from the International \( K^+ \) Collab.)
F. Grard et al., Laboratoire Inter-universitaire Belge des Hautes Energies,
Bruxelles.
Y. Goldschmidt-Clermont et al., CERN, Geneva.

One dimensional theory of piezoelectric transducer vibrations and their application
H. J. Hilke, CERN, Geneva

Analysis of the annihilation process \( \bar{p}p \rightarrow n^+\pi^-\omega^- \) at rest using
Veneziano-type amplitude
S.U. Chung, L. Montanet, S. Reucroft
CERN, Geneva

Problèmes de production des particules à très hautes énergies. Revue de la situation expérimentale
O. Czyzewski, CERN et Cracovie

\( \bar{p}p \) annihilations at rest into \( \eta^0\pi^+\pi^- \)
P. Espigat, C. Ghesquière, E. Liljestål and L. Montanet,
CERN-Collège de France Collaboration
PHYSICS (cont'd).

Strong interactions at low energy (Talk given by M. Ferro-Luzzi, in "Review of CERN Experimental Program", on March 4, 1971)

Review of quasi-two-body reactions D.R.O. Morrison, CERN, Geneva

Search for CP-violation in \( K^0 \rightarrow \pi^+\pi^-\pi^0 \) decays L. Montanet et al. CERN, Geneva
G. Burgun, CERN, Saclay
O. Skjeggestad, Univ. of Oslo.

The \( AS = \Delta Q \) Rule
F. James, CERN, Geneva

Structure functions for inelastic proton-proton scattering at different energies
P.V. Chliapnikov, O. Czyzewski,
Y. Goldschmidt-Clermont
Serpukhov, Cracow, CERN

Search for a symmetry system of pion production in reactions \( K^+p \rightarrow \pi^+ + (K^0 + \text{anything}) \)
D.R.O. Morrison et al., CERN, Geneva
Aachen, Berlin, CERN, London,
Vienna and Brussels, CERN Collaborations

Experimental test of semi-local duality in \( K^+p + K^0n \) backward scattering
C. Bricman, E. Pagiola and C. Schmid
IISN, Brussels and CERN, Geneva

Proposal to study \( \bar{\nu}p \) reactions at 60 and 200 GeV/c in the 30 inch hydrogen bubble chamber at NAL
D.R.O. Morrison et al., CERN, Geneva
Experimental evidence of the exponential increase of the particle level density with mass
Y. Goldschmidt-Clermont et al., CERN
CERN, Cracow, Serpukhov Collaboration

Observation of narrow \( \eta \) peaks in the \( \delta^+ \) and \( \Lambda^+ \) regions in \( \bar{p}p \) annihilations at 5.7 GeV/c
B.R. French et al., CERN, Geneva

Study of the \( K^* \Lambda \) and \( K^* \Sigma^0 \) final states from \( \pi^-p \) interactions at 3.9 GeV/c
L. Montanet et al., CERN, Geneva

A new analysis of \( K\pi \) scattering as observed in \( K^+p + K^0 \rightarrow \Delta^+ \Delta^- \) from 3 to 13 GeV/c
Y. Goldschmidt-Clermont et al., CERN, Geneva
F. Grard et al., Lab. Interuniversitaire Belge des Hautes Energies, Brussels,
E. Colton et al., University of California, Los Angeles

K\( \pi \) Interactions
V.P. Henri, CERN, Geneva

\( K(890) \) and \( K(1420) \) production in quasi two-body reactions at 10 GeV/c
D.R.O. Morrison et al., CERN
Aachen, Berlin, CERN, London, Vienna Collaboration

Quasi two-body reactions in 16 GeV/c \( \pi^-p \) collisions
D.R.O. Morrison et al., CERN
Aachen, Berlin, Bonn, CERN, Heidelberg Collaboration

Scaling in a hypercharge annihilation reaction
D.R.O. Morrison et al., CERN
and Amsterdam-Nijkegen Collaboration
PHYSICS (cont'd)

Lambda production in 10 GeV/c K⁻p interactions
D.R.O. Morrison et al., CERN
Aachen, Berlin, CERN, London, Vienna Collaboration

Experimental results on Few-Body reaction(Rapporteurs talk at Helsinki)
W. Kittel, CERN, Geneva

Observation of the double charge exchange reaction \( \bar{p}p \rightarrow \Xi^-\bar{\Xi}^- \) at 3.6 GeV/c
B.R. French et al., CERN, Geneva

Diffraction dissociation and processes involving charge, strangeness and exotic exchanges in four-body final states of K p reactions at 10 GeV/c
D.R.O. Morrison et al., CERN
Aachen, Berlin, CERN, London, Vienna Collaboration

\( K^-\pi^- \) elastic scattering cross section from the reaction \( K^-p \rightarrow K^-\Lambda^+ \)
at 10 GeV/c
D.R.O. Morrison et al., CERN
Aachen, Berlin, CERN, London, Vienna Collaboration

Confirmation of a proposal to study high energy \( \pi^-\bar{p} \) interaction in the 30 inch hydrogen bubble chamber NAL (Chicago)
D.R.O. Morrison et al., CERN

Study of helicity conservation for the \( (\pi\pi\pi), (K\pi\pi) \) and \( (p\pi\pi) \) systems in the reactions \( K^-p \rightarrow pK^-\pi^- \) at 10 GeV/c and \( \pi^+p \rightarrow \pi^+\pi^+\pi^- \) at 16 GeV/c
D.R.O. Morrison et al., CERN

Results on the \( \Delta S = \Delta Q \) rule from leptonic \( K^0 \) decays,
L. Montanet et al., CERN,
G. Burgun et al., CEN, Saclay
O. Skjeggestad, University of Oslo, Blindern, Norway

CERN/D.Ph.II/ADM 71+1
11.6.1971
(a new version is in preparation)

CERN/D.Ph.II/PHYS 71-27
14.6.1971

CERN/D.Ph.II/PHYS 71-28
11.6.1971

CERN/D.Ph.II/PHYS 71-29
11.6.1971

CERN/D.Ph.II/PHYS 71-30
17.6.1971

CERN/D.Ph.II/PHYS 71-31
17.7.1971
(has been withdrawn)

CERN/D.Ph.II/PHYS 71-32
18.6.1971
(not available for distribution)

CERN/D.Ph.II/PHYS 71-33
23.6.1971
(a new version is in preparation)

CERN/D.Ph.II/PHYS 71-34
25.6.1971
(a new version is in preparation)
Correlations between leading particles in the reactions $K^- + p \rightarrow K^0 + p + \text{anything}$, and $\pi^- + p \rightarrow \pi^- + p + \text{anything}$
D.R.O. Morrison et al., CERN

Scaling in exotic and non-exotic inclusive $\pi^+ p$ reactions at 8 and 16 GeV/c
D.R.O. Morrison et al., CERN
Aachen, Berlin, Bonn, CERN, Cracow, Heidelberg, Warsaw Collaboration

Study of symmetry systems in the emission of pions produced in $\pi^+ p$, $\pi^- p$ and $K^- p$ inclusive reactions
D.R.O. Morrison et al., CERN

Resonance production in five-body final states from $K^- p$ interactions at 5 GeV/c
Y. Goldschmidt-Clermont et al., CERN
CERN, Brussels Collaboration
TCC

Agenda for the meeting on
Wednesday, January 20, 1971
at 9.30 a.m. in the Council Room, R. Budde

Working Party for Scanning and
Measuring Equipment in BEBC, R. Budde

Meeting on Wednesday, January 20, 1971
Decisions taken at the meeting, R. Budde

A collection of numbers from the 1970
survey of European bubble Chamber Groups
R. Budde

Lay-out of BEBC photos,
Databox, fiducials, n.r. references

Minutes of the Gargamelle users meeting
held on 20th of January 1971

Memorandum to members of CERN/TCC
Next meeting, R. Budde

Agenda for the meeting on
Wednesday, February 17, 1971
at 9.30 a.m. in the Council Room
M. Cresti

Gargamelle User's meeting - Agenda

Meeting on Wednesday, February 17, 1971
Decisions taken at
Gargamelle User's meeting

The use of plates for gamma detection
in BEBC, (BEBC working party on neutral
particle detection), H. Wenninger

TCC working group on the detection of
neutral secondaries in BEBC,
A review of experience with $\gamma$-converting
plates in $H_2$ and $D_2$ bubble chambers.
D.J. Miller
TCC (cont'd)

Neutral pion spectroscopy with bubble chamber
H. Wenninger and H. Leutz

In preparation
H. Wenninger

Agenda for the meeting on
Wednesday, April 21, 1971
at 9.30 a.m. in the Council Room
R. Budde

Proposal to search for new sources of
penetrating particles using
Gargamelle

Proposal to measure parameters of the
\( \tau \) and semi-leptonic decays of the \( K^0_L \)
(Rutherford High Energy Lab.)

Meeting on Wednesday, April 21, 1971
Decision taken at the meeting
R. Budde

Track chamber experiments proposed
until May 1, 1971, R. Budde

Modification of the databox lay-out
of BEBC photos, H. P. Reinhard

Agenda for the meeting on
Wednesday, June 16, 1971
at 9.30 a.m. in the Council Room
R. Budde

Letter from the Chairman of the Track
Chamber Committee to all members of the TCC
Mr. Cresti

Proposal for a large statistics \( K^0 \)
exposure at 7 GeV/c in BEBC,
Birmingham, CERN, Heidelberg, LPNHE Paris
E. Quercigh
TCC (cont'd)

Proposal for an pd experiment at 4, 4.25, 4.50, 4.75, 5 and 5.25 GeV/c requesting an exposure of 130,000 photographs at each momentum. The Strasbourg, Neuchâtel and Lausanne hydrogen bubble chamber groups.

Proposal to extend the present 4.2 GeV/c K p exposure in the CERN 2m HBC to a total of 3 x 10^6 pictures. M. Ferro-Luzzi and R. Armenteros.

Meeting on Wednesday, June 16, 1971. Decision taken at the meeting, R. Budde.

Letter from the Chairman of TCC M. Cresti, to all members of the TCC.
Multiwire proportional Chambers used in analogue mode for beam profile and flux measurements
I. Lehraus and R. Matthewson

Beam for TC
A. Grant

Minutes discussions on precision in BEBC,
R.K. Böck

Step the spiral reader test programme
E.H. Eichmann

Step the spiral reader test programme
E.H. Eichmann

Description of
Raven : data channel programme and
Woodstock : LSD output check programme
P. Wellstead

Trends in off-line events analysis
Talk at a CERN meeting on future technical developments
R.K. Böck

Probabilités, estimation de paramètres et contrôle de la qualité
D. Drijard et B. Sadoulet,
(Séminaire organisé par l'ASSPA)

Cartes d'électronique du Lecteur en Spirale Digitisée (LSD)
J. Domeniconi, J.C. Legrand et R. Platteaux

The evaluation of the Mangiaspago system, its accuracy and its usefulness for high energy physics
E.H. Eichmann

Preliminary results on LSD ionization measurements
J.C. Gouache
TEC

Progress report on measurements of plumbicon characteristics, Amato and Ypsilantis

K GROUP

Survey of $Y^*$ parameters below 2.2 GeV (up to May 1971) M. Ferro-Luzzi

USBC

The acoustic and elastic constants for some common metals and plastics at low temperatures, R. Brown

Principles and techniques of ultrasonic bubble chambers (open day on ultrasonic bubble chambers), R. Brown