Memo CP-C/295

DATE: October 24, 2001
TO: Distribution
FROM: V. McLane
SUBJECT: 4-momentum transfer (CP-C/289) and momentum distribution data (CP-C/290) consensus

There is agreement on 4-momentum transfer and momentum distribution data.

Regarding a comment made by Felix Chukreev on 4-momentum transfer: the data I have compiled are for incident energies below 1 GeV. When the time comes to compile data dealing with mass invariance, we will deal with how to compile it.

Proposed LEXFOR entry and dictionary additions follow.

Distribution:
  M. Chiba, Sapporo
  F. E. Chukreev, CAJaD
  S. Dunaeva, Sarov
  O. Gritzay, KINR
  K. Kato, JCPDG
  M. Kellett, NEADB
  V. N. Manokhin, CJD

  S. Maev, CJD
  O. Schwerer, NDS
  S. Takács, ATOMKI
  F. T. Tárkányi, ATOMKI
  V. Varlamov, CDFE
  Zhuang Youxiang, CNDC
  NNDC File

Dictionary 24 (Data Headings)

-t   4-momentum transfer squared (= q**2)

Dictionary 25 (UNITS)

GEV2/C2	(GeV/c)**2	EC2
MB/GEV2/C2	Miilibarns/(GeV*c)**2	D4
MB/MEV/C	Millibarns/MeV/c	DP

Dictionary 32 (Parameters)

DP	Differential with respect to linear momentum of outgoing particles
DT	Differential with 4-momentum transfer squared of outgoing particles

Dictionary 36 (Quantities)

,DT	Differential c/s with respect to 4-momentum transfer squared.
LON,DA/DP,,IPA	Diff. with respect to longitudinal sec.lin.mom.,int. over ang.range
LON,DA/DP,P,IPA	Diff. with respect to longitudinal sec.lin.mom.,int. over p ang.range

LEXFOR Entry (Differential Data)

Differential with respect to angle and linear momentum of outgoing particles

REACTION Coding: DA/DP in SF6 (Parameter).

Unit type: DP (*e.g.*, MB/MEV/C)

Example:
  (…(5-B-8,X)…,LON,DA/DP)   differential with respect to angle and longitudinal secondary linear
                            momentum

Differential with respect to 4-momentum transfer squared

REACTION Coding: DT in SF6 (Parameter).

Unit type: D4 (*e.g.*, MB/GEV2/C2)

Example:
  (2-HE-4(P,EL)2-HE-4,,DT)   differential with respect to 4-momentum transfer squared

A LEXFOR entry on momentum will be drafted.