DESY 95-100
hep-ph/9507401

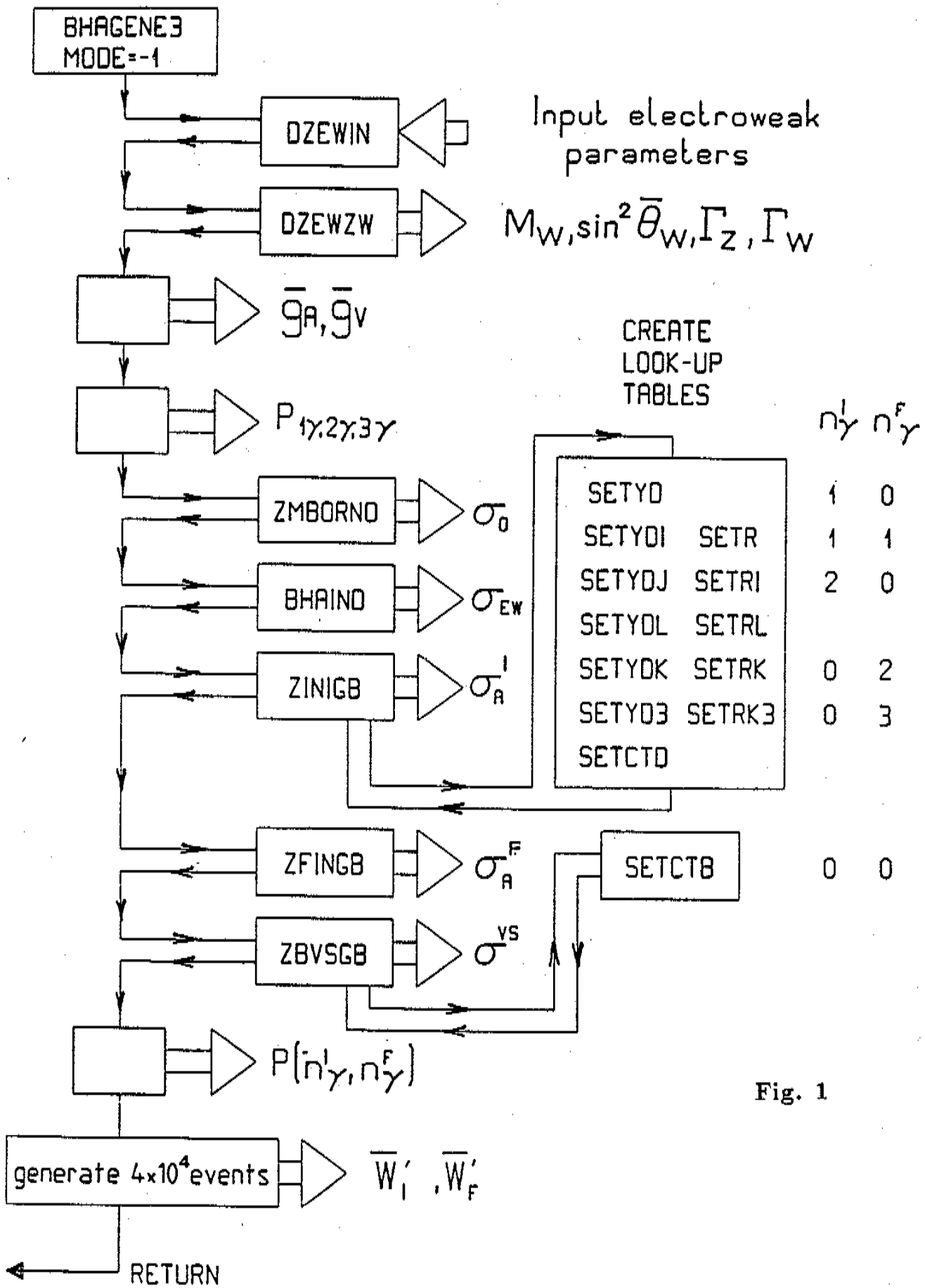

Fig. 1

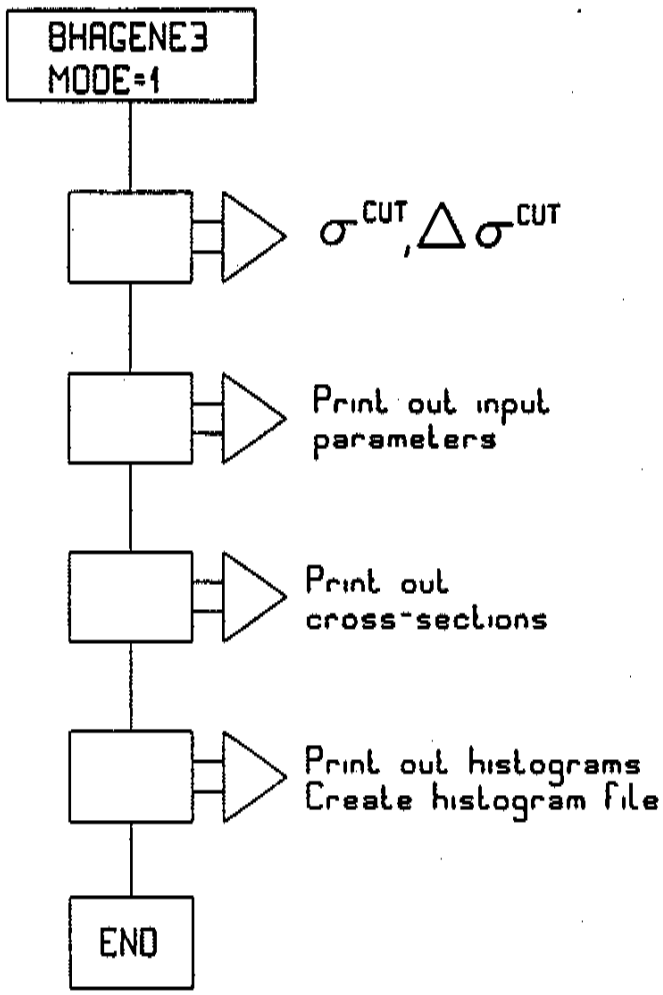
BHAGENE3
MODE=1
$\sigma^{CUT}, \Delta\sigma^{CUT}$
Print out input parameters
Print out cross-sections
Print out histograms
Create histogram file
END

Fig. 3

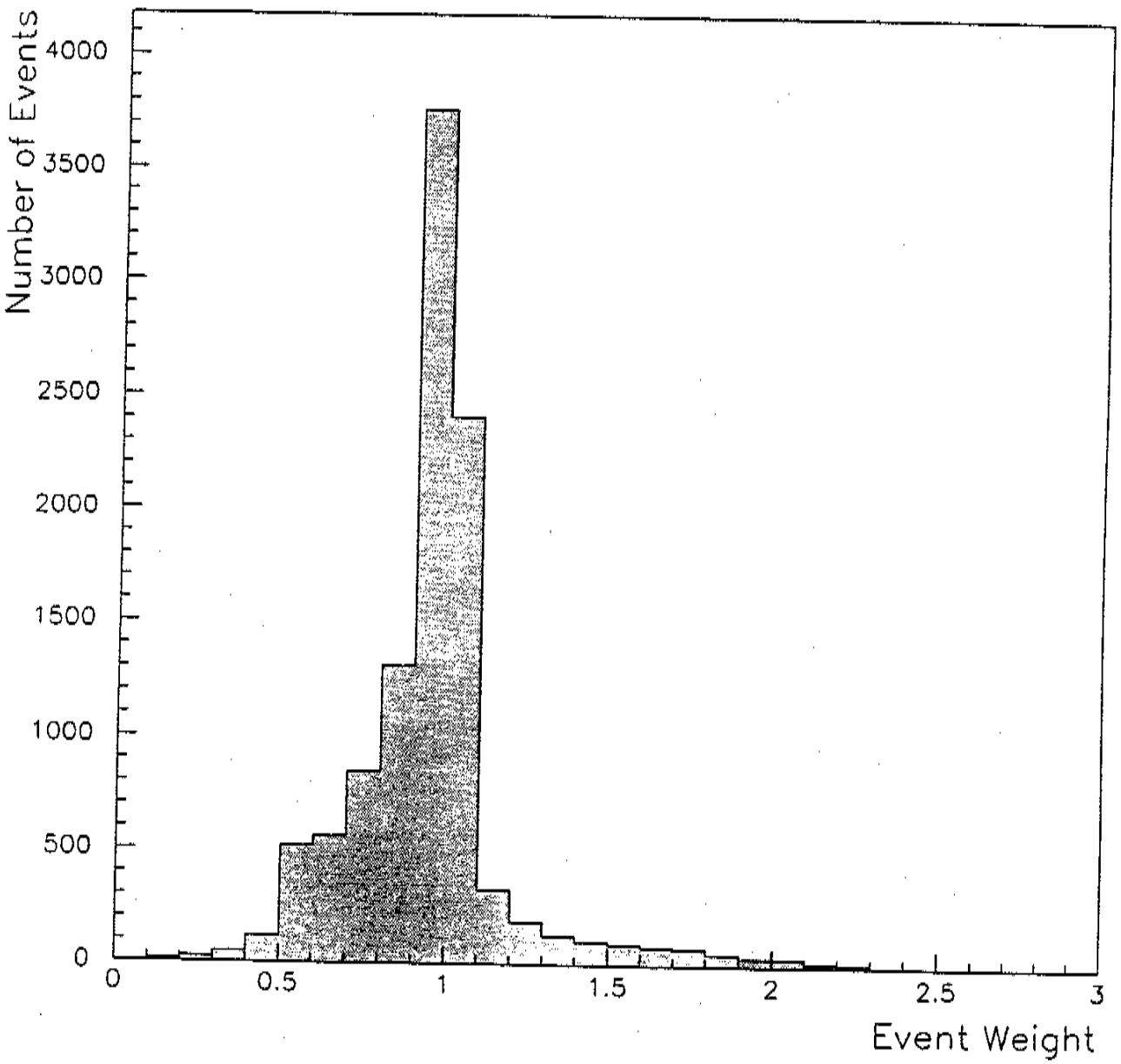
Number of Events
4000
3500
3000
2500
2000
1500
1000
500
0
0
0.5
1
1.5
2
2.5
3
Event Weight

Fig. 5

```
 EPS. ACCURACY OF NUMERICAL INTEGRATION = 0.10000E-05

 START PARAMETERS (MASSES, WIDTHS ARE IN GEV):

 MODE= 1
 IHVP= 3
 IQCD= 0
 IBOX= 1  T CHANNEL = 1  IAMT4= 1

 INITIAL CHARGE= -1.0000
 FINAL CHARGE  = -1.0000
 FINAL COLOR   =  1.0000
 FINAL MASS    =0.511003E-03

 Z BOSON MASS  = 91.1800
 T QUARK MASS  =150.0000
 HIGGS MASS    =  100.00
 ALFA STRONG   =  0.1200
 QCD CORR.FACTOR TO Z-WIDTH CHANNELS (NO B) =  0.0400
 QCD CORR.FACTOR TO Z-WIDTH CHANNEL (INTO B)=  0.0450

 QUANTITIES CALCULATED FROM INPUT PARAMETERS:
 W-BOSON MASS=   80.284697
 SIN2W       =    0.22470609
 Z-WIDTH     =    2.49581864
 W-WIDTH     =    2.024040

 SELECTED CONFIGURATION:
 POSITRON POLARIZATION    =  0.0000
 ELECTRON POLARIZATION    =  0.0000
 POSITIVE FERMION HELICITY=  0.00
 NEGATIVE FERMION HELICITY=  0.00


 GA=    0.612730 GV=    0.044075


 BHABHA GENERATION WITH EXPONENTIATION

 FIXED CONSTANTS

  NTRY=   40000 YMIN=  0.005000 YMAX=  0.990000 CTC1= -0.800000 CTC=  0.800000
 NM=  2 IRUN=  3 IEXP=  1 WTMAX=  2.00  IF2G=  1

 KINEMATICAL CUTS

 LOWER , UPPER COS(THETA) OF L+ IN LAB : -0.7000 0.7000
 LOWER , UPPER COS(THETA) OF L- IN LAB : -0.7000 0.7000
 UPPER  COS(THETACOLL) IN LAB :          -0.9000
 MINIMUM LAB ENERGY OF L+,L- IN LAB :     2.0000 2.0000 GEV

 PHOTON GENERATION PROBABILITIES

 P2GI= 0.4348 P2GF= 0.4348 P1= 0.1425 P2= 0.1499

 P3C= 0.5652 P4C= 0.7869 P5C= 0.8668 P3GF= 0.2583

 GENERATED CUT CROSS SECTIONS:

    W (GEV) =     91.00000

   SIG0 (NB) =     1.67579    PURE BORN

  SIG0E (NB) =     1.70379    E.W. CORR. BORN

   SBVS (NB) =     0.22511    APPROX. VIRT.+SOFT

   SINI (NB) =     0.35928    APPROX. INITIAL RADN.

   SFIN (NB) =     0.99548    APPROX. FINAL RADN.

   SIGE (NB) =     1.03072    EXACT CROSS SECTION

  DSIGE(NB) =     0.00395    STAT. ERROR ON SIGE

AVERAGE WEIGHT =     0.65241

  AWTI      =     0.56039

  AWTF      =     0.66314

INPUT RANDOM NUMBER SEED =   713883717

OUTPUT RANDOM NUMBER SEED =   136387721

NUMBER OF OUTPUT UNIT WEIGHT EVENTS   =       20000
```

Fig. 4