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Submitter :
Language : Fortran

Library: POOL
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General Monte-Carlo Phase-Space

FOWL uses the Monte-Carlo method to calculate phase space distributions arising from particle interactions. The events are generated according to Lorentz-invariant phase space, and after each event the user may calculate (in a subroutine) all quantities (effective masses, angles, moments, delta squared, etc.) whose distribution he wants.

Moreover, the user may calculate, for each quantity, a weight (or 'matrix element', for example a Breit-Wigner) which is in general a function of the kinematic quantities for the event. In addition, one can investigate the effects of cutoffs, selections or biases in an actual experiment by imposing the same selections on events in FOWL. The program then prints histograms and/or scatter plots of quantities calculated by the user.

Structure:

SUBROUTINE subprogram
User Entry Names: FOWL
Files Referenced: INPUT, OUTPUT, PUNCH
External References: RNDM (V104), UBLANK (V300), IUCHAN (Y201), DATIME (Z007), user-supplied subroutine USER.

Usage:

See **Long Write-up**.

Source:

Event generator GENEV was adapted by K. Kajantie from a program by G. Lynch.

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