ADDENDUM TO

A programme for calculating multiple phase space integrals by a Monte Carlo method on the Ferranti Mercury computer

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The programme described by a report under the above title (quote henceforward as MC) has been improved by:

1) Inclusion of the 2-body case,
2) printing estimates of the actual $\xi^*$
3) printing the case number again before $\xi^*$ and the spectra follow.

ad 1) Compare MC, p.39.

If the machine reads $n=2$, it jumps to a programme which calculates the analytical expression for the phase space integral and places a 1 into the correct position of the spectrum ($\xi$-shape spectrum!). The programme runs as usual otherwise; the operator at the computer does not notice any difference. Only the data tape must be prepared differently (compare MC p.39):
2
b
E
m_1
m_2
\Delta\epsilon

particle number
case number
CM-energy (total)
larger \{ mass. They may be equal
smaller \}
energy interval

\{ clari:

l_1
m_1
M_1
\mu_1
l_2
m_2
M_2
\mu_2
-1

decay data if wanted, otherwise -1 only.

At the blank tape the machine stops. If the 2 body case happens to be the first of a series of calculations, the random numbers can be read in now, but they must not. They must then be read in with the first data for n \(\geq 3\). 2-body cases may appear wherever wanted in a long series of data tapes. They will be dealt with automatically as if they were usual MC-cases.
ad 2) Compare MC, p.46.

In the error estimate no longer \( \frac{1}{\lambda} \sum_\lambda \) is printed itself.

Instead \( \int_\lambda^\rho \) is printed itself.

ad 3) Compare MC, p.47.

The \( \int_\lambda^\rho \) coming just before the spectra is 1.

the case number \( b \). One has then

\[ \text{24 cm blank } b \int_\lambda^\rho \text{ spectra } \ldots \]