

Ruby S.L. (1973), Argonne National Laboratory Argonne USA
Gruverman I.J., Seidel C.W. (eds) Mössbauer Effect Methodology. Springer,
Boston, MA

Why Misfit When You Already Have X2?.

A modification of X2, called Misfit, is suggested; it provides a comparative goodness-of-fit criterion. The numerical value of Misfit gives the fraction of the experimental Signal that remains “unfitted. ” After this quantity is defined and the motivation for introducing it is explained, some examples of its use are given.

$$mf = \left| \sum_i^N \left[\left(\frac{C_i - T_i}{\sqrt{C_i}} \right)^2 - 1 \right] \right| / \left| \sum_i^N \left[\left(\frac{B - C_i}{\sqrt{C_i}} \right)^2 - 1 \right] \right|$$

T_i and C_i are theory values and counts at channel i, respectively. B is the fitted baseline.