

ZMATH 2013a.00876

Nievergelt, Yves

Forward and backward analyses of cubic equations.

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Summary: This module demonstrates the forward and backward analysis to prove in advance the degree of accuracy of the computed values, from Karl Stumpff's and W. Kahan's formulae, of the real solutions of some real cubic equations. Applications include the computation of acidity in chemistry.

Classification: N35 M65 H35

Keywords: numerical analysis; cubic equations; inequalities; chemistry; chemical kinetics; mathematical applications