

# Numerical Differentiation of Functions in the Context of Computational (Numerical) Diameter

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We discuss a C(N)D-statement consisting of the known and elaborating in decades C(N)D-1 statement which can be and should be interpreted as quantitative statement of approximation theory and calculus mathematics, which together with new prolongations of C(N)D-2 and -3 in aggregate is suggested as natural theoretical and computational scheme of further developments of numerical analysis.

Further, the problem of approximate differentiation of a function by unexact information in the form of an arbitrary finite set of trigonometric Fourier coefficients was solved in the context of computational (numerical) diameter.