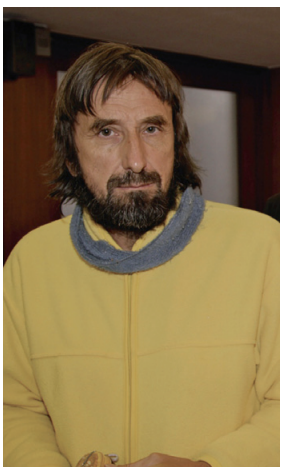
Tools for evaluation of superfunctions, abelfunctions and non-integer iterates of holomorphic functions are collected. For a giver transfer function T, the superfunction is solution F of the transfer equation F(z+1)=T(F(z)) . The abelfuction is inverse of F. In particular, thesuperfunctions of factorial, exponent, sin; the holomorphic extensions of the logistic sequence and of the Ackermann functions are suggested. from ackermanns, the tetration (mainly to the base b>1) and pentation (to base e) are presented. The efficient algorithm for the evaluation of superfunctions and abelfunctions. The graphics and complex maps are plotted. The possible applications are discussed. Superfunctions significantly extend the set of functions that can be used in scientific research and technical design. Generators of figures are loaded to the site TORI, http://mizugadro.mydns.jp for the free downloading. With these generators, the Readers can reproduce (and modify) the figures from the Book. The Book is intended to be applied and popular. I try to avoid the complicated formulas, but some basic knowledge of the complex arithmetics, Cauchi integral and the principles of the asymptotical analysis should help at the reading.

Dmitrii Kouznetsov



Graduated from the Physics Department of the Moscow State University (1980). Work: USSR, Mexico, USA, Japan. Century 20: Proven the quantum stability of the optical soliton, suggested the low bound of the quantum noise of nonlinear amplifier, indicated the limit of the single mode approximation in the quantum optics. Century 21: Theory of ridged atomic mirrors, formalism of superfunctions, TORI axioms.

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