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CONVEX MAJORANTS METHOD IN THE THEORY OF NONLINEAR VOLTERRA EQUATIONS

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ABSTRACT. The main solutions in the sense of Kantorovich of nonlinear Volterra operator-integral equations are constructed. Convergence of the successive approximation method is established through studies of the majorant integral equations and the majorant algebraic equations. Estimates are derived for the solutions and for the intervals on the right margin of which the solution of nonlinear Volterra operator-integral equation has blow-up or solution start branching.

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