



518.517  
MSC 123  
DOI <https://doi.org/10.26516/1997-7670.20-24.1>

## Multilinear Volterra Equation of the First Kind: Elements of the Theory and Numerical Methods

I. I. Ivanov<sup>1</sup>, P. P. Petrov<sup>2</sup>

<sup>1</sup> Irkutsk State University, Irkutsk, Russian Federation

<sup>2</sup> Novosibirsk State Technical University, Novosibirsk, Russian Federation

**Abstract.** In this paper the author gives an overview of the recent results in the theory and numerical methods for solving multilinear Volterra integral equations of the first kind...

Keywords: majorant equation, Lambert function, nonlinear integral inequalities, Sharp estimates, numerical methods.

### 1. Introduction

#### 2. Specificity of multilinear Volterra equations of the first kind

In (4)  $N = 1; 2; 3$ , we write the series

**Definition 1.** The text of the definition

$x^{123456789}$

**Theorem 1.** The statement of the theorem

**Proof.** The text of the proof



Based on the theorem 1 we obtain

**Theorem 2.** The statement of the theorem

Based on the theorem 2 we obtain

**Theorem .** The text of the unnumbered theorem

This work was supported by RFBR grant 00 - 00 -00000.





