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## Multilinear integral Volterra equation of the first kind: elements of the theory and numerical methods \*

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**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*

$\bar{x}$  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*

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Based on the theorem 2 we obtain

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

$$x + y^2 = \ln x \quad (2.1)$$

Substituting in the 2.1 instead of  $x$  variable  $y$  we obtain

$$y + y^2 = \ln y \quad (2.2)$$

By the formula 2.2

**Lemma 1.** *The text of the lemma*

**Lemma.** *unnumbered lemma*

**State 1.** *The text of the statement*

**Proposition 1.** *The text of the proposition*

**Corollary 1.** *The text of the corollary*

**Remark 1.** The text of the remark

Given the remark 1

Thus, even in the case of constant kernels continuous solution of the bilinear equation exists ...

### 3. Majorant equation (bilinear case)

Using the notation of [?; ?] ...

### 4. Conclusion

We recommend using the following samples for references. The list of references should be in alphabetical order. Please use the Crossref DOI URL as the permanent link

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## Полилинейные интегральные уравнения Вольтерра I рода: элементы теории и численные методы

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**Аннотация.** В статье дан обзор результатов, полученных авторами в последние годы в области теории и численных методов решения полилинейных интегральных уравнений Вольтерра I рода...

**Ключевые слова:** мажорантные уравнения; функция Ламберта; нелинейные интегральные неравенства; наилучшие оценки; численные методы.

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