



#### Título: Iterative Methods For The Solution Of Equations

Precio: Desconocido
<b>Año:</b> 1964
Edición: 1ª
<b>ISBN:</b> 9780828403122

From the Preface (1964): "This book presents a general theory of iteration algorithms for the numerical solution of equations and systems of equations. The relationship between the quantity and the quality of information used by an algorithm and the efficiency of the algorithm is investigated. Iteration functions are divided into four classes depending on whether they use new information at one or at several points and whether or not they reuse old information. Known iteration functions are systematized and new classes of computationally effective iteration functions are introduced. Our interest in the efficient use of information is influenced by the widespread use of computing machines ... The mathematical foundations of our subject are treated with rigor, but rigor in itself is not the main object. Some of the material is of wider application ... Most of the material is new and unpublished. Every attempt has been made to keep the subject in proper historical perspective ... "

Readership

Graduate students and research mathematicians.

Reviews

"There is a vast amount of material in the book and a great deal is either new or presented in new form ... Although the mathematical treatment is rigorous throughout, attention is definitely focused on the computational aspects of the topic ... Many examples are provided to show how well-known I.F. are special cases of the general results ... The author has certainly succeeded in presenting a systematic account of a large class of known I.F. and this makes the work an interesting basic text as well as a valuable reference book."

-- Mathematical Reviews

Table of Contents



**General Preliminaries** 

- 1.1 Introduction
- 1.2 Basic concepts and notations

General Theorems on Iteration Functions

- 2.1 The solution of a fixed-point problem
- 2.2 Linear and superlinear convergence
- 2.3 The iteration calculus

The Mathematics of Difference Relations

- 3.1 Convergence of difference inequalities
- 3.2 A theorem on the solutions of certain inhomogeneous difference equations
- 3.3 On the roots of certain indicial equations
- 3.4 The asymptotic behavior of the solutions of certain difference equations

Interpolatory Iteration Functions

- 4.1 Interpolation and the solution of equations
- 4.2 The order of interpolatory iteration functions
- 4.3 Examples

**One-Point Iteration Functions** 

- 5.1 The basic sequence Es
- 5.2 Rational approximations to Es
- 5.3 A basic sequence of iteration functions generated by direct interpolation
- 5.4 The fundamental theorem of one-point iteration functions
- 5.5 The coefficients of the error series of Es

**One-Point Iteration Functions With Memory** 

- 6.1 Interpolatory iteration functions
- 6.2 Derivative-estimated one-point iteration functions with memory
- 6.3 Discussion of one-point iteration functions with memory

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Multiple Roots

7.1 Introduction

- 7.2 The order of Es
- 7.3 The basic sequence Es
- 7.4 The coefficients of the error series of Es
- 7.5 Iteration functions generated by direct interpolation
- 7.6 One-point iteration functions with memory
- 7.7 Some general results
- 7.8 An iteration function of incommensurate order

**Multipoint Iteration Functions** 

- 8.1 The advantages of multipoint iteration functions
- 8.2 A new interpolation problem
- 8.3 Recursively formed iteration functions
- 8.4 Multipoint iteration functions generated by derivative estimation
- 8.5 Multipoint iteration functions generated by composition
- 8.6 Multipoint iteration functions with memory

Multipoint Iteration Functions: Continuation

- 9.1 Introduction
- 9.2 Multipoint iteration functions of type 1
- 9.3 Multipoint iteration functions of type 2
- 9.4 Discussion of criteria for the selection of an iteration function

Iteration Functions Which Require No Evaluation of Derivatives

- 10.1 Introduction
- 10.2 Interpolatory iteration functions
- 10.3 Some additional iteration functions

#### Systems of Equations

11.1 Introduction



- 11.2 The generation of vector-valued iteration functions by inverse interpolation
- 11.3 Error estimates for some vector-valued iteration functions
- 11.4 Vector-valued iteration functions which require no derivative evaluations

A Compilation of Iteration Functions

- 12.1 Introduction
- 12.2 One-point iteration functions
- 12.3 One-point iteration functions with memory
- 12.4 Multiple roots
- 12.5 Multipoint iteration functions
- 12.6 Multipoint iteration functions with memory
- 12.7 Systems of equations

Appendices

A. Interpolation

- B. On the jth derivative of the inverse function
- C. Significant figures and computational efficiency
- D. Acceleration of convergence
- E. Numerical examples
- F. Areas for future research

Bibliography

Index