

Contents

Acta Universitatis Carolinae. Mathematica et Physica, Vol. 15 (1974), No. 1-2, [1]--[2]

Persistent URL: <http://dml.cz/dmlcz/142312>

Terms of use:

© Univerzita Karlova v Praze, 1974

Institute of Mathematics of the Academy of Sciences of the Czech Republic provides access to digitized documents strictly for personal use. Each copy of any part of this document must contain these *Terms of use*.



This paper has been digitized, optimized for electronic delivery and stamped with digital signature within the project *DML-CZ: The Czech Digital Mathematics Library* <http://project.dml.cz>

ACTA UNIVERSITATIS CAROLINAE
MATHEMATICA ET PHYSICA

Vol. 15 No. 1—2 1974

**Proceedings
of the
Third Conference on Basic Problems
of Numerical Mathematics**

CONTENTS

The Third Conference on Basic Problems of Numerical Mathematics	3
<i>Brilla, J.</i> : Finite Element Analysis of a System of Quasiparabolic Partial Differential Equations	5
<i>Дьяконов, Е. Г.</i> : О сходимости разностных методов для некоторых нелинейных задач	11
<i>Fage, M. K., Maximej, G. A.</i> : On Approximate Solution of Systems of Linear Ordinary Differential Equations	17
<i>Fox, L.</i> : Two Free-boundary Problems With Singularities	19
<i>Fiedler, M.</i> : Some Results on Eigenvalues of Nonnegative Matrices	25
<i>Fučík, S., Kratochvíl, A., Nečas, J.</i> : Kačanov-Galerkin Method and its Application	31
<i>Hadeler, K. P.</i> : On a Class of Nonlinear Eigenvalue Problems	35
<i>Hertling, J.</i> : Multivariate Approximation Theory with Λ -splines	39
<i>Hlaváček, I.</i> : On a Conjugate Semi-variational Method for Parabolic Equations	43
<i>Яненко, Н. Н., Коновалов, А. Н.</i> : Технологические аспекты численных методов математической физики	47
<i>Jankovič, J.</i> : A Parallel Method of Solution of the Differential Equations by the Formulas Containing Higher Derivatives	55
<i>Janovský, Vl.</i> : Hybrid Variational Principles and their Use in the Finite Element Method . .	59
<i>Kubíček, M., Višňák, K.</i> : Two Classes of Numerical Methods for Stiff Problems	63
<i>Кублановская, В. Н.</i> : Применение нормализованного разложения к решению частичної проблемы собственных значений матрицы	67
<i>Kuhnert, F.</i> : Beziehungen zwischen den Verfahren von Ritz und Bazley	79
<i>Lanczau, E.</i> : Integral Equations and Boundary Value Problems for Elliptic Partial Differential Equations	81
<i>Lehman, R.</i> : Some Experiences in Numerical Treatment of Nonlinear Eigenvalue Problems .	85
<i>Марчук, Г. И., Кузнецов, Ю. А.</i> : Итерационные методы решения систем линейных уравнений с особенностями матрицами	87
<i>Marek, I.</i> : A Reduction Method for Approximate Solving Large Elliptic Systems	97
<i>Mikloško, J.</i> : Parallelism in Numerical Analysis	103
<i>Nassif, N. R.</i> : On a Finite-element Collocation Method which Reproduces the Padé table . .	105

<i>Ostrowski, A. M.</i> : Über Fehlerabschätzungen a priori und a posteriori	111
<i>Plemmons, R. J.</i> : Direct Iterative Methods for Linear Systems Using Weak Splittings	117
<i>Porath, G.</i> : Über die numerische Behandlung Volterrascher Integralgleichungen zweiter Art	121
<i>Práger, M., Taufer, J., Vitásek, E.</i> : Overimplicit Methods for the Solution of Evolution Problems	125
<i>Přikryl, P.</i> : Universal Approximations of Certain Functionals in Banach Spaces	135
<i>Рамазанов, М. Д.</i> : Построение кубатурных формул для многомерных областей с гладкими границами	137
<i>Raviart, P. A.</i> : Finite Element Methods for Solving the Stationary Stokes and Navier-Stokes Equations	141
<i>Rektorys, K.</i> : On the Method of Least Squares on the Boundary	151
<i>Robert, F.</i> : Iterations chaotiques série-parallele pour des équations non linéaires de point fixe .	153
<i>Segeth, K.</i> : A Remark on a Class of Universal Hill Functions	155
<i>Sloboda, F.</i> : Note About the Parallel Projection Method for Solution of System of Linear Algebraic Equations	157
<i>Spijker, M. N.</i> : Optimum Error Estimates for Finite-difference Methods	159
<i>Stránská, C.</i> : Interpolation and Reproducing Kernels	165
<i>Weinelt, W.</i> : A Method of Bazley-Fox Type for the Eigenvalues of the Laplace Operator . .	167
<i>Whiteman, J. R.</i> : Treatment of Boundary Singularities in Two Dimensional Elliptic Problems by Galerkin Methods	171
<i>Wilkinson, J. H.</i> : Note on Inverse Iteration and Ill-Conditioned Eigensystems	173
<i>Young, D. M.</i> : Iterative Methods for Solving Large Systems of Linear Equations	179
<i>Ženíšek, A.</i> : Tetrahedral Finite $C^{(m)}$ -elements	189