

aspects of solving differential equations numerically.

After a first chapter in which general discretization methods are considered, the other chapters deal with: forward step methods, Runge- Kutta methods, linear multistep methods, multistage multistep methods and a final chapter on other discretization methods for initial-value problems. Nordsieck's method falls within this last chapter as well as the extrapolation method of Gragg-Bulirsch-Stoer.

There is not yet a refined theory for stiff systems of equations available but the author hopes that this theory of strong exponential stability might turn out to be a possible basis for such a theory.

For those interested in the fundamental side of numerical analysis this book will be a valuable addition to their library.

A. I. van de Vooren

Forthcoming papers

The following papers have been accepted for publication and will appear in the Journal of Engineering Mathematics:

1. Theory of propagation of cracks, by S. M. Sharfuddin.
2. Longitudinal surface curvature effect in magnetohydrodynamics, by N. G. Bodas and B. K. Gupta.
3. An isothermal theory of anisotropic rods, by M. C. Dökmeci.
4. Eigenvalues of a slightly stiff pendulum with a small bob, by W. D. Lakin.
5. On the radiation of short surface waves by a heaving circular cylinder, by G. Alker.
6. One-dimensional wave propagation and Fokker-Planck's equation, by E. Ghandour.
7. Saint-Venant's problem for inhomogeneous and anisotropic solids, by D. Iesan.
8. Incompressible viscous flow near the leading edge of a flat plate admitting slip, by A. I. van de Vooren and A. E. P. Veldman.
9. Some aspects of non-uniform convergence in an elliptic singular perturbation problem, by O. Diekmann.
10. Structure of contact region for non-symmetric initial disturbances, by L. Halabisky.
11. A variational approach to an unsymmetrical water wave scattering problem, by C. A. N. Morris.
12. Plastic-elastic torsion, optimal stopping and free boundaries, by J. W. Cohen.
13. Large-time inversion of certain Laplace transforms in dissipative wave propagation, by M. L. Rasmussen.
14. On non symmetric vibration of deep spherical sandwich sheels, by S. Mirza and A. V. Singh.
15. Analysis of parameter changes in chemical systems via geometric programming, by J. J. Dinkel and R. Lakshanan.
16. Application of the finite element method with sectional linearization to flow problems, by D. H. Keuning.