# Proceedings of the tenth South African

SYMPOSIUM ON NUMERICAL MATHEMATICS

Ballito 2, 3 & 4 July 1984

sanum & the dept.of computer science university of natal durban

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#### SYMPOSIUM

ON

### NUMERICAL MATHEMATICS

Ballito, 2, 3 and 4 July 1984

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#### PREFACE

For the three days July 2-4, 1984 numerical mathematicians of South Africa as well as two leading numerical analysts from overseas gathered in Ballito, Natal, to celebrate the special event of the Tenth South African Symposium on Numerical Mathematics. This event was organised by the South African Society for Numerical Mathematics (SANUM) in conjunction with the University of Natal. A record total of 38 papers were read at this gathering. Invited papers were presented by Dr Sean McKee of the Oxford University Consortium for Industrial Numerical Analysis and by Dr GR Joubert of Philips, Eindhoven.

The Proceedings are a published record of 33 of the papers presented. The choice was left to the authors as to whether they wished to publish their papers in full or as a summary. All contributions included in the Proceedings are published as received from the authors.

This preface provides the opportunity to thank all the speakers, chairmen of sessions and participants for their contributions. Our thanks also to the University of Natal, in particular the head of the Department of Computer Science Prof Sartori-Angus and his very able assistant Ms Ethel Carte, for helping with the organisation of the Symposium.

Financial support for this meeting was again obtained from IBM (South Africa). In times of escalating costs it would not have been possible to present this Symposium without IBM's help and this support is gratefully acknowledged.

Jan Snyman (Vice-Chairman : SANUM)

September 1984

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## CONTENTS

	page
Preface	iii
Participants	iv
UCINA - A vehicle for academic-industrial collaboration	
by S. McKee	1
Weakly singular discrete integral inequalities and their	
applications by J. Dixon and S. McKee	29
Parallel mimd algorithms for initial-boundary value problems	
by G.R. Joubert	70
Tridiagonal system solvers for an experimental parallel	
computer by G.R. Joubert and E. Cloete	96
Practical error estimation in numerical integration	
by D.P. Laurie	112
Splitting methods for the Cubic Schrödinger Equation	
by J.A.C. Weideman	114
The adjustment of accelerometer data	
by D.M. Murray	116
Friction factor prediction for fully developed laminar twisted-	
tape flow by J.P. du Plessis and D.G. Kröger	118
Linear stability of stiff differential equation solvers	
by Т.J. Урта	122
Stability of numerical solutions of equations arising in the	
dynamic fracture of curved composite beams by S. Adali	124
Variational inequalities and penalty methods in plasticity	
by B.D. Reddy	126
A structured quadratic program	
by N.J. Breytenbach	128
The quadratic isoparametric transformation of the triangle	
by M.L. Baart	130
Some properties of an estimate of structured Jacobians and	
Hessians by J. Flachs	132
Collocation with non-polynomial B-Splines	
by C.J. Wright	134
Numerical nonlinear instability in the Korteweg-De Vries	#
equation by M.F. Maritz	152

	page
Convolution with the aid of B-Splines	
by C.H. Rohwer	154
Numerical Differentiation in the Tokamak Plasma Equilibrium	
problem by J.D. Neethling	162
Solution of Burgers' equation with large Reynolds numbers	
by F.D. van Niekerk	166
Die numeriese oplossing van Burger se vergelyking met groot	
Reynolds getalle deur 'n ruimte-tyd eindige-element-metode	
by F.D. van Niekerk	168
A simple general purpose A <sub>2</sub> -stable numerical method for	
dynamical systems with stiff oscillations by E. Eitelberg	180
Modular simulation of complex dynamical systems	
by E. Eitelberg	182
The construction of an arc of bifurcation points for a tubular	
reactor model by H. Viljoen	184
Product integration rules by D.S. Lubinsky	188
The application of spectral methods in numerical weather	
prediction by H.A. Riphagen	192
Nonlinear instability	
by B.M. Herbst	212
A stochastic pursuit-evasion differential game on a Torus:	
A numerical solution by Y. Yavin	214
Numerical methods for the solution of non-linear optimization	
problems by J.D. Kies	216
Multiple solutions of an elliptic partial differential equation	
by H.J. van Walsem	220
A galerkin approach for modelling oceanic fronts in coastal	
waters by D. van Forcest	222
"Richardson's Second Method" and stiff O.D.E. systems	
by R.A.B. Bond	224
Procedures for global optimization	
by J.A. Snyman	226
Boundary elements applied to reservoir problems containing	
singularities by G.N. Bakkes and J.F. Botha	250