Proceedings
of the fifth South African

SYMPOSIUM ON NUMERICAL MATHEMATICS

Durban, 18, 19 & 20 July 1979



computer science department
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H.R. Weistroffer

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PREFACE

The Symposia on Numerical Mathematics have been an annual event in Durban since 1975. Serving primarily as a forum for South African researchers and appliers of Numerical Mathematics to exchange ideas and discuss new developments in this field, these Symposia have experienced increasing international interest and participation.

This fifth Symposium on Numerical Mathematics held under the auspices of the Computer Science Department at the University of Natal was attended by 35 delegates. These proceedings are published as a record of the 23 papers presented. All papers and abstracts are published as received from the authors, with the understanding that some of the papers will eventually be published in final form elsewhere.

Invited papers were read by Professor Dr. Gerhard Meinardus, University of Siegen, Germany, and Professor Dr. Yaakov Yavin, Ben Gurion University, Israel. Professor Meinardus's visit was made possible by a generous grant from IBM South Africa, who also supported the Symposia in the previous three years.

Professor Dr. Gerhard Joubert, Head of the Computer Science Department, University of Natal, and the founder of, and driving force behind, these Symposia, took leave from the Philips Research Institute in Hamburg, Germany, where he is currently on furlough, to attend this Symposium and report on his current work.

A further overseas delegate was Dr. U. Shaked, Tel Aviv University, Israel, who is currently visiting the Council for Scientific and Industrial Research in Pretoria.

Appreciation and thanks for assistance in organising this year's Symposium go to Mrs Sheilagh Cameron-Dow and Mrs. Pat Duminy of the Publicity Office of the University of Natal, and to Mrs. Lindy Basnett, Mrs. Thea Dixon and Mrs. Di Magrath of the Computer Science Department.

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