Proceedings
of the eighth South African

SYMPOSIUM
ON
NUMERICAL MATHEMATICS

Durban, 19, 20 & 21 July 1982

sanum &

computer science department
university of natal
durban

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edited by

JA Snyman

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PREFACE

The Eighth South African Symposium on Numerical Mathematics held in Durban on 19, 20 and 21 July 1982, was the first organised by the South African Society for Numerical Mathematics (SANUM) and the Department of Computer Science of the University of Natal. Previously, since its inception in 1975, this annual event was organised solely by the Computer Science Department under the capable guidance of the originator of the Symposia, Prof GR Joubert. At the Seventh Symposium, in view of Prof Joubert's imminent departure to take up a post in Holland, the delegates decided to form SANUM, one of the objectives of the Society being to ensure the continued existence of the Symposia.

The proceedings are a published record of all 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 authors.

Invited papers were read by Professor G Fichera of the Academia Nazionale dei Lincei, Rome, Professor P Rabinowitz of the Weizman Institute, Rehovot and by Professor GR Joubert of Philips, Eindhoven. Their visits were made possible by financial support from IBM (South Africa), the South African Council for Scientific Research and Philips N.V.

Sincere appreciation and thanks go to Mrs Ethel Carte of the Computer Science Department for assisting with the organisation of the Symposium.

JA Snyman (Secretary SANUM)

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