TABLE OF CONTENTS

INTRODUCTION	vii
SCIENTIFIC PROGRAMME	ix
LIST OF PARTICIPANTS	xiii
INVITED LECTURES	
C.W. CURTIS and G.I. LEHRER, Homology Representations of Finite	
Groups of Lie Type.	1
R. DELBOURGO, Matrix Correlation Functions.	29
D. ELLIOTT, Some Aspects of Singular Integral Equations - A Numerical Analyst's Viewpoint.	41
F. HIRZEBRUCH, Some Examples of Algebraic Surfaces.	55
I.G. MACDONALD, Lie Groups and Combinatorics.	73
M. MENDÈS-FRANCE, Paper Folding, Space-Filling Curves and Rudin-Shapiro Sequences.	85
G. PILZ, Near-Rings: What They Are and What They Are Good For.	97
T.J. RIVLIN, The Optimal Recovery of Functions.	121
N.J.A. SLOANE, Recent Bounds for Codes, Sphere Packings and Related Problems Obtained by Linear Programming and Other	
Methods.	153
G.S. WATSON, Three Aspects of the Statistics of Directions.	187
E.C. ZEEMAN, Bifurcation and Catastrophe Theory.	207
Contributed Papers: ALGEBRA, NUMBER THEORY	
D. FEARNLEY-SANDER, Euclid with an Unfamiliar Ring.	273
B.J. GARDNER, Absolute Retracts, Relatively Injective Simple Objects and Brown-McCoy Radicals.	277
R.B. HOWLETT and G.I. LEHRER, A Comparison Theorem and other	
Formulae in the Character Ring of a Finite Group of Lie Type.	285
G. KARPILOVSKY, On Commutative Group Algebras.	289
R. MATTHEWS, Orthogonal Systems of Polynomials over a Finite	-00
Field with Coefficients in a Subfields.	295
C.J. SMYTHE, A Lattice Colouring Problem.	303
A.J. yan der POORTEN, Substitution Automata, Functional Equations and "Functions Algebraic over a Finite Field".	307
Contributed Papers: ANALYSIS	
M.A.B. DEAKIN, The Formal Power Series Approach to Elementary	
Catastrophe Theory.	313

V.V. DEODHAR, On Central Extensions of Rational Points of Algebraic Groups.	319
W. MEERSMAN, Ideals and Stability.	323
J. MITCHELL, Singular Integrals on Bounded Symmetric Domains II.	327
W. RICKER, A New Class of Convex Bodies.	333
D. YOST, Geometry of Banach Spaces and Convex Subsets of c^2 .	341
Contributed Papers: STATISTICS	
D. BROADFOOT, FEED - Forms Entry Editor.	345
R.M. CLARK, Comparison of Palaeomagnetic Records from Lake Sediments.	357
R. CORLUY, Mathematics and Phylogeny.	365
R. CORLUY and W. MEERSMAN, Equivalence Between Distance Functions.	369
P.J. DICHOMIDES, The Rose of Intersections.	373
N.J. FISHER, Goodness-Of-Fit and Outlier Detection Procedures for Samples from Fisher's Distribution on the Sphere.	377
L. HAMEY, Enhancements to MDOS.	381
D. McNEIL, Two-Way Table Analysis of Physiological Data.	391
B.P. MURPHY, Production and Reproduction of Statistical Software	397