CONTENTS

Introduction to this issue
By Pawel Szeptycki
The n -th order elliptic boundary problem for noncompact boundaries
By H.O. Cordes and A.K. Erkip
Some remarks on the origins of the theory of functions of a
real variable and of the descriptive set theory
By K. Kuratowski 25
Nonlinear boundary value problems for some classes of ordinary
differential equations
By A. Granas, R.B. Guenther and J.W. Lee 35
A remark on uniform classification of boundedly compact linear
topological spaces
By P. Mankiewicz and J. Vilimovsky 59
Lie derivatives in differentiable spaces
By Charles D. Marshall
A lipschitz invariant of normed linear spaces related to the
entropy numbers
By C. Bessaga
Reproducing kernel spaces and analytic continuation
By William F. Donoghue, Jr
On some problems related to the extended domain of the
Fourier transform
By PAWEL SZEPTYCKI
An analogue of Bäcklund's theorem in affine geometry By S.S. Chern and C.L. Terng
Asymptotic expansions in perforated media with a periodic structure
By J.L. Lions
Linearized decay of disturbances of a viscous liquid in an open container
By W.M. Greenlee
Reinforcement problems in elasto-plasticity
By L.A. Caffarelli and A Friedman
A homotopy theoretic proof of the additivity of the trace
By M. Breuer
D, 111. D100011 100

Convergence of approximation methods for eigenvalues of	
completely continuous quadratic forms	
By R.D. Brown	199
The C^* -algebra of the elliptic boundary problem	
By P. Colella and H.O. Cordes	217
Comparison theorems for infinite systems of differential-functions	
equations and strongly coupled infinite systems of first order	
partial differential equations	
By J. Szarski	239
On the topological triviality of solution sets	
By C.J. Himmelberg and F.S. Van Vleck	247
The divergent beam x-ray transform	
By C. Hamaker, K.T. Smith, D.C. Solomon	
and S.L. Wagner	253
A mixed application of functional and numerical analysis to biostatis	
By Emilio Gagliardo	285
Sur le theorème de partition de Mme Hervé	
By M. Brelot	293