

# CONTEMPORARY MATHEMATICS

120

## Selfadjoint and Nonselfadjoint Operator Algebras and Operator Theory



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Selfadjoint and Nonselfadjoint  
Operator Algebras  
and Operator Theory

# CONTEMPORARY MATHEMATICS

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120

## Selfadjoint and Nonselfadjoint Operator Algebras and Operator Theory

Proceedings of the CBMS Regional Conference  
held May 19–26, 1990  
at Texas Christian University, Fort Worth, Texas  
with support from the National Science Foundation

Robert S. Doran  
Editor



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To Shirley and Dave

# Contents

<b>Preface</b>	xv
<b>Conference participants</b>	xvii
<b><math>C^*</math>-algebras associated to two-step nilpotent groups</b> LAWRENCE BAGGETT and JUDITH PACKER	1
<b>Some applications of a recent characterization of operator algebras</b> DAVID P. BLECHER	7
<b>Problems in multivariable operator theory</b> RAÚL E. CURTO	15
<b>The Taylor spectrum of infinite direct sums</b> RAÚL E. CURTO and KEREN YAN	19
<b>Operator algebras and differential topology</b> JOHN FROELICH	29
<b>Operator algebras with arbitrary Hochschild cohomology</b> FRANK L. GILFEATHER and ROGER R. SMITH	33
<b>Representation of symplectic vector spaces obtained as unitary dilations</b> PALLE E. T. JORGENSEN	41
<b>Imp primitivity systems associated to regions in <math>\mathbb{R}^n</math>, connections between geometry and spectrum, a sample of problems</b> PALLE E. T. JORGENSEN	61
<b>Triangular algebras — another chapter</b> RICHARD V. KADISON	63

<b>Decomposability of operators relative to two subspaces</b>	
A. KATAVOLOS	77
<b>The equation <math>Tx = y</math> in nest algebras</b>	
E. G. KATSOULIS	83
<b>Some questions concerning nest algebras</b>	
DAVID R. LARSON and DAVID R. PITTS	89
<b>Some problems on triangular and semi-triangular operators</b>	
DAVID R. LARSON and WARREN R. WOGEN	97
<b>Two problems on almost diagonalization of normal operators</b>	
RICHARD A. LINDEN and HÉCTOR SALAS	101
<b>Spatial implementation of lattice isomorphisms</b>	
MICHAEL MCASEY	113
<b>Intrinsic isomorphism invariants for some triangular operator algebras</b>	
PAUL S. MUHLY, CHAOXIN QIU and BARUCH SOLEL	117
<b>Some operator-algebraic aspects of the theory of infinite graphs</b>	
WILLIAM L. PASCHKE	123
<b>On analytic subalgebras of UHF algebras</b>	
JUSTIN R. PETERS	127
<b>Five problems on operator algebras</b>	
N. C. PHILLIPS	133
<b>Analytic triangular algebras with integer valued cocycle</b>	
YIU TUNG POON	139
<b>Fourier-Stieltjes algebras of locally compact groupoids</b>	
ARLAN RAMSAY and MARTIN E. WALTER	143
<b>On the preduals of dual algebras and their tensor products</b>	
ZHONG-JIN RUAN	157
<b>An introduction to Toeplitz operators associated with analytic crossed products</b>	
KICHI-SUKE SAITO	165

<b>Distance formula and contractive projections</b>	
BARUCH SOLEL	169
<b>Constructions of extreme <math>n</math>-positive linear maps</b>	
SZE-KAI TSUI	175
<b>Duality for actions and coactions of measured groupoids on von Neumann algebras</b>	
TAKEHIKO YAMANOUCHI	183
<b>Cyclic cohomology and the index theory of transversely elliptic operators</b>	
GUOLIANG YU	189
<b>Ideals of generalized Calkin algebras</b>	
SHUANG ZHANG	193
<b>Problems on <math>C^*</math>-algebras of real rank zero and their multiplier algebras</b>	
SHUANG ZHANG	199
<b>A collection of problems on operator algebras</b>	
DAVID BLECHER	205
KENNETH R. GOODEARL	
RICHARD V. KADISON	
KATHY MERRILL	
WILLIAM L. PASCHKE	
ALAN L. T. PATERSON	
FREDERICK W. SHULTZ	
BARUCH SOLEL	
<b>The Texas Groupoid in King Robert's Court</b>	215

## Preface

In May, 1990, a week long conference on operator algebras was held at Texas Christian University in Fort Worth, Texas. The conference was one of the series organized under the auspices of the Conference Board of the Mathematical Sciences (CBMS) and the National Science Foundation. Professor Paul S. Muhly of the University of Iowa gave ten lectures during the week under the title *Coordinates in Operator Algebra: Groupoids and Categories, their Representations and Applications*. A volume containing Professor Muhly's lectures will be published separately from the present one by the American Mathematical Society in the CBMS-Regional Conference Series.

During the week twenty-eight talks, in addition to Dr. Muhly's, were given by participants. These talks covered a broad spectrum (no pun intended) of topics of current interest in operator algebra and operator theory. This volume contains slightly expanded versions of most of these. The editor, who also served as Conference Director, encouraged those planning to attend to bring some of their favorite open problems. Many did and as a result there are more than one hundred problems and questions scattered throughout this volume. It is hoped that these will serve to stimulate further research in the various areas considered.

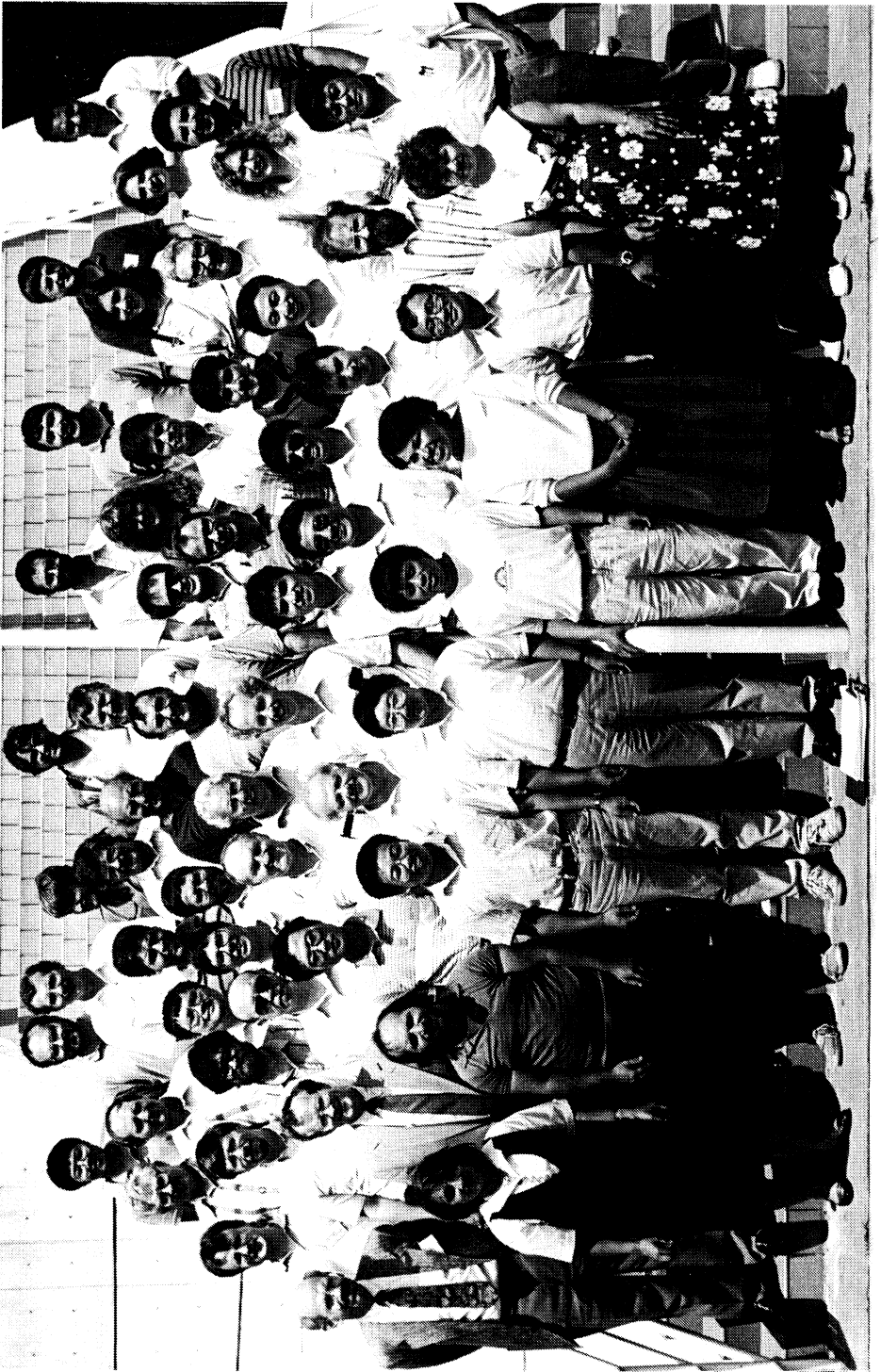
Those papers that are in final form and will not appear elsewhere are clearly indicated in a footnote at the bottom of the first page of the article.

The editor wishes to express his sincere gratitude and thanks to all who made possible this volume and the CBMS-Conference. Special thanks go to the NSF for their financial support and to Paul Muhly for agreeing to prepare and give ten lectures (even when loaded down with administrative duties) and then for his masterful job of delivering them. All of us at the conference salute him for a virtuoso performance! Special thanks also to Texas Christian University for hosting yet another conference on mathematics, to my wife Shirley Doran for a beautiful job of preparing the manuscripts in  $\mathcal{A}\mathcal{M}\mathcal{S}$ -TEX, and to my colleague David Addis for his invaluable help with our computers in the production of this volume.

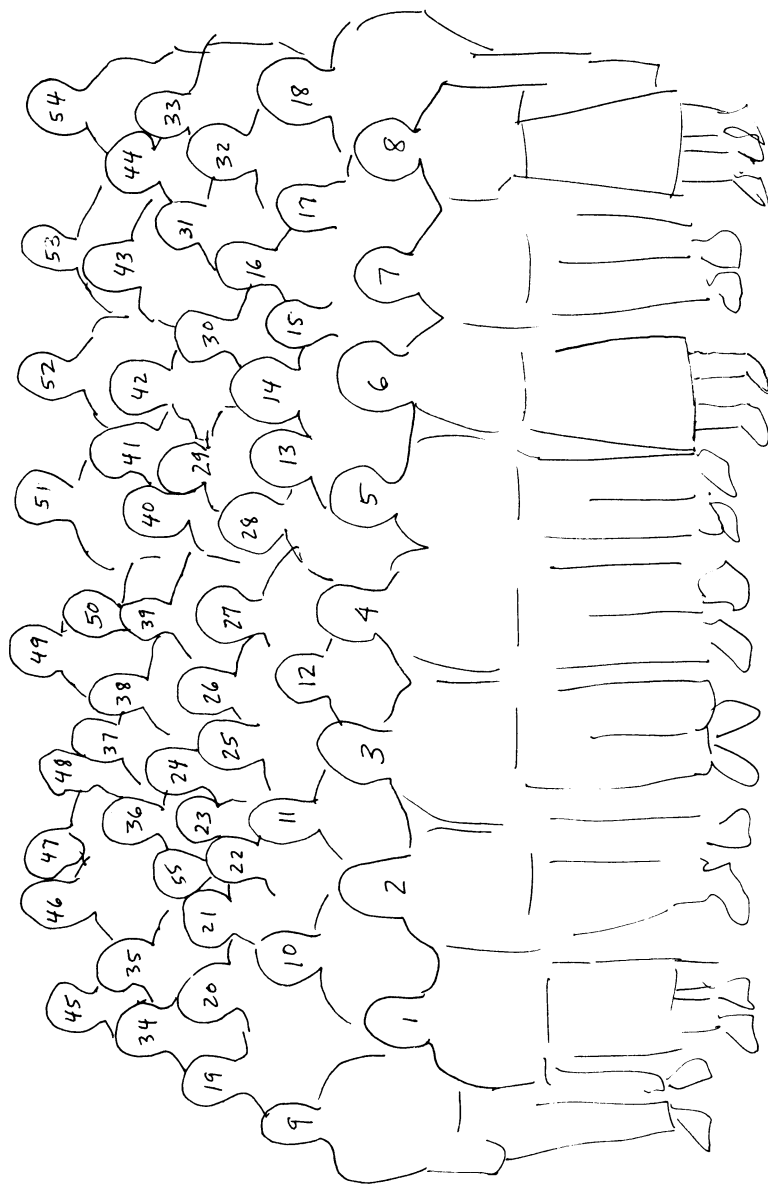
I wish to thank all of the participants who attended the conference, especially those who presented papers and contributed to this volume. Finally, it is a pleasure to acknowledge the help and support of the American Mathematical Society in the preparation and publication of these proceedings.

Robert S. Doran

## **Conference Participants**







1. Lida Shadabi, 2. Ed Bednarek, 3. Guoliang Yu, 4. Zhong-jin Ruan, 5. Yiu Tung Poon, 6. Ximena Catepillan, 7. Kichi-Suke Saito, 8. Shirley Doran, 9. Paul Muhly, 10. Bob Doran, 11. Keren Yan, 12. Dick Kadison, 13. Shuang Zhang, 14. N. Sivaramakrishnan, 15. Elias Katsoulis, 16. Chaoxin Qiu, 17. Baruch Solel, 18. Xingde Dai, 19. Jim Wright, 20. Bill Paschke, 21. Héctor Salas, 22. Norberto Salinas, 23. Efton Park, 24. Steve Wright, 25. Arlan Ramsay, 26. Frank Gilfeather, 27. Fred Shultz, 28. Takehiko Yamanouchi, 29. Pallo E. T. Jorgensen, 30. Aristides Katavolos, 31. Sterling Berberian, 32. Ellen Parker, 33. Patricio Olivares, 34. Victor Belfi, 35. Ray Fabec, 36. Raúl Curto, 37. Fred Ruttimann, 38. Martin Edwards, 39. Alan Lambert, 40. Justin Peters, 41. Kathy Merrill, 42. David Pitts, 43. Judy Packer, 44. Laura Mastrangelo, 45. Jingbo Xia, 46. Michael Marsalli, 47. Michael McAsey, 48. Alex Kumjian, 49. John Froelich, 50. Roger Smith, 51. Fred Goodman, 52. Jack Sze-Kai Tsui, 53. Warren Wogen, 54. David Blecher, 55. Peter Che-Chen Chu

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