

## BIOGRAPHICAL SKETCH

**NAME:** David R. Larson  
**PLACE OF BIRTH:** Superior, Wisconsin  
**MARITAL STATUS:** Married    **NO. OF CHILDREN:** 2

### CURRENT OFFICE ADDRESS AND TELEPHONE NUMBER

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**CITIZENSHIP:**  
U.S.

## EDUCATION

Degree	Year	Institution
B.S.	1965	Wisconsin State University, Superior (Honors: Owl and Serpent Honor Society; Who's Who Among Students in American Colleges and Universities; Graduation with Highest Honors)
M.A.	1973	University of California, Berkeley
Ph.D.	1976	University of California, Berkeley

## PROFESSIONAL EXPERIENCE

Data Computer Specialist Mathematics Consultant	1968-72	United States Air Force
Graduate Assistant	1973-76	University of California, Berkeley
Assistant Professor	1976-80	University of Nebraska, Lincoln
Associate Professor	1981-83	University of Nebraska, Lincoln
Visiting Senior Scholar	1984, Spring	Leeds University, England
Professor	1984-86	University of Nebraska, Lincoln
Visiting Full Professor	1986, Fall	University of Pennsylvania, Philadelphia
Professor	1987-present	Texas A&M University

## PROFESSIONAL RECOGNITION

1. Who's Who in Science and Engineering
2. Who's Who Among America's Teachers, 1996, 2000
3. TAMU Mathematics Department Teaching Award, Spring 1996
4. Who's Who in the World
5. 2005 Association of Former Students Distinguished Teaching Award, College Level
6. 2006 Association of Former Students Distinguished Teaching Award, University Level

## SPECIALIZATION

Functional Analysis, Operator Algebras, Operator Theory, Applied Harmonic Analysis

## GRANTS HELD

1. National Science Foundation Faculty Research Grant, MCS77-01971, 1977-80, Operator Algebras
2. National Science Foundation Faculty Research Grant, MCS80-03617, 1980-83, Operator Algebras

3. National Science Foundation, Faculty Research Grant, MCS83-01740, 1983-86, Operator Algebras and Operator Theory
4. S.E.R.C. Visiting Scholar Grant, April and May, 1984.
5. National Science Foundation Faculty Research Grant DMS-9844359, 1986-89, Operator Algebras and Operator Theory.
6. National Science Foundation Faculty Research Grant DMS-8903317, 1989-91, Operator Algebras and Operator Theory (with R. Smith).
7. National Science Foundation Mathematical Sciences Research Group [MSRG] Workshop in Linear Analysis and Probability Grant DMS-8921369 (with W. Johnson, G. Pisier, and J. Zinn), 1990-93.
8. National Science Foundation Faculty Research Grant DMS-9107137, 1991-94, Operator Algebras and Operator Theory (with R. Smith).
9. National Science Foundation Mathematical Sciences Research Group [MSRG] Workshop in Linear Analysis and Probability Grant DMS-9311902, 1993-97 (with W. Johnson, G. Pisier and J. Zinn).
10. National Science Foundation Mathematical Sciences Research Grant DMS-9401544, 1994-97 Operator Algebra and Operator Theory, (D. Larson alone).
11. National Science Foundation Mathematical Sciences Research Grant DMS-9706810, 1997-2000, Operator Algebra, Operator Theory and Applications, (D. Larson alone). \$153,000;
12. National Science Foundation Mathematical Sciences Research Grant DMS-0070796, 2000-2004, Operator Algebras and Wavelets, (D. Larson alone).
13. Proposal for a workshop at the Oberwolfach Mathematics Institute, Oberwolfach, Germany, was funded for Feb 2004. I was a co-organizer, We had 25 international participants.
14. National Science Foundation Workshop Grant: Great Plains Operator Theory Symposium, 2004-2005. I was the main organizer of this conference and was the PI on this grant proposal. We had 125 participants from 15 countries. About 25% were graduate students.
15. Proposal for a Special Semester at the University of Vienna for Spring 2005 was funded. I was a co-proposer, as a member of my FRG group.
16. National Science Foundation Focused Research Group [FRG] Program: "Collaborative Research: Focused Research on Wavelets, Frames, and Operator Theory", July 1, 2002 to June 30, 2005, extended for two more years to June 30, 2007.
17. National Science Foundation Workshop Grant: "Workshop in Analysis and Probability, DMS-0601926, 2005-2008 (joint with W. Johnson, G. Pisier, J. Zinn).
18. National Science Foundation: Texas A&M University "Research Experience for Undergraduates" [REU] Site proposal; I have been an Associated PI on this grant 2000-present.

## MEMBERSHIPS

1. American Mathematical Society

2. Mathematical Association of America

## INVITED RESEARCH TALKS

1. University of Kansas, April 1977, seminar.
2. University of Alabama, January 1978, colloquium.
3. American Mathematical Society Meeting (Special Session), Iowa City, IA, April 1979, 20 Min.
4. Texas Tech University, December 1980, colloquium.
5. Great Plains Operator Theory Seminar (GPOTS-1981), Lawrence, KS, May 1981, half-hour talk; (Note: This was the first official edition of GPOTS.)
6. Sixth International Operator Theory Conference, Timisoara, Romania, June 1981, hour talk.
7. Conference on Factorization Problems in Functional Analysis, Santa Monica, CA, August 1981, half-hour talk.
8. International Conference on the Mathematical Theory of Networks and Systems, Santa Monica, CA, August 1981, half-hour talk.
9. American Mathematical Society Annual Meeting (Special Session), Denver, CO, January 1983, 20 min. talk.
10. National Science Foundation Regional Conference (William Arveson), Lubbock, TX, August 1983, (special one-hour lecture).
11. Texas A&M University, January 1984, seminar.
12. University of Houston, January 1984, colloquium.
13. University of Georgia, February 1984, colloquium.
14. University of Alabama, February 1984, colloquium and seminar.
15. King's College, University of London, April 1984, two-hour seminar.
16. Trinity College, Dublin, May 1984, colloquium.
17. University of Glasgow, May 1984, colloquium.
18. University of Newcastle, May 1984, seminar.
19. University of Leeds, May 1984, colloquium.
20. Iowa State University, February 1985, colloquium.
21. Arizona State University, March 1985, colloquium.
22. S.U.N.Y.-Buffalo, March 1985, seminar.
23. Great Plains Operator Theory Seminar (GPOTS-1985), Texas A&M University, May 1985, half-hour talk.
24. Florida Atlantic University, February, 1986, colloquium.
25. Special Year in Operator Theory, Conference on "Asymmetric Operator Algebras," 5 special one hour lectures, March 10-14, 1986, Indiana University.
26. Great Plains Operator Theory Seminar (GPOTS-1986), April, 1986, University of Cincinnati, half-hour talk.
27. University of Pennsylvania, October 1986, seminars.
28. Texas A&M University, November 1986, colloquium.
29. Great Plains Operator Theory Seminar (GPOTS-1987), University of Kansas, May 1987, half-hour talk.

30. Functional Analysis - Electrical Engineering Conference, Phoenix, June 1987, half-hour talk.
31. Operator Algebras Conference, Durham, England, July 1987, hour talk.
32. American Math. Society Meeting (Special Session), Lincoln, Nebraska, October 1987, 20 min.
33. University of North Carolina, November 1987, seminar.
34. UTAMIRFAS, Austin, March, 1988, one-hour.
35. American Math. Society Summer Research Institute, "Operator Theory/Operator Algebras and Applications," special one-hour lecture, July 1988, University of New Hampshire, Durham.
36. Great Plains Operator Theory Symposium (GPOTS-1989), May 1989, University of Houston, half-hour talk; (Note: This was the first time GPOTS was officially called a "symposium").
37. University of North Carolina, December, 1989, a main speaker in a mini-conference.
38. Great Plains Operator Theory Symposium (GPOTS-1990), April 1990, Albuquerque, half-hour talk.
39. NSF-CBMS Regional Conference for Paul Muhly, (one-half hour talk), May 1990.
40. University of Cincinnati, May 1990, colloquium.
41. University of California - San Diego, July, 1990, seminar.
42. University of Texas - San Antonio, November, 1990, colloquium.
43. University of Waterloo, Ontario, February, 1991, seminar.
44. University of North Carolina, June, 1991, colloquium.
45. University of California - San Diego, July, 1991, seminars.
46. American Math. Society Meeting (Special Session), Fargo, ND, October 1991, 20 min.
47. University of Nebraska, Lincoln, March 1992, colloquium and seminar.
48. American Math. Society Meeting (Special Session), Tuscaloosa, AL, March 1992, 20 min.
49. Great Plains Operator Theory Symposium (GPOTS-1992), May 1992, University of Iowa, half-hour.
50. University of Nanjing, China, June 1992, one hour.
51. Zhaozhung College, China, June 1992, one hour.
52. Qufu Normal University, China, June 1992, Five special one-hour lectures. (I was the main speaker at a small conference in Qufu organized around my 10-day visit to China.)
53. University of New Mexico, Albuquerque, October 1992, colloquium and seminar.
54. American Math. Society Meeting (Special Session), Dayton, OH, October 1992, 20 min.
55. University of North Carolina, Chapel Hill, November 1992, colloquium, and a main speaker in a mini-conference.
56. University of North Carolina, Charlotte, November 1992, colloquium.
57. University of California, Berkeley, December 1992, Functional Analysis Colloquium.
58. University of Alabama, Tuscaloosa, March 1993, colloquium.
59. Conference on "The Interaction between Operator Theory, Control Theory, and Wavelets", sponsored by NSF, USAF and NSA, May 1993, Charlotte, North Carolina, one of four

- main speakers. (The others were C. Chui, C. Foias and V. Wickerhauser.)
60. Great Plains Operator Theory Symposium (GPOTS-1993), June 1993, Boulder, CO, half-hour.
  61. Southwest Texas State Univ., San Marcos, July 1993, colloquium.
  62. University of Waterloo, Ontario, July 1993, seminar.
  63. American Mathematical Society Annual Meeting (Special Session), Cincinnati, OH, January 1994, 20 min.
  64. American Mathematical Society Meeting (Special Session), Manhattan, KS, March 1994, 20 min.
  65. University of California, Irvine, March 1994, colloquium and seminar.
  66. University of California, San Bernardino, March 1994, colloquium.
  67. University of North Carolina, Charlotte, April 1994, colloquium (three talks).
  68. Texas Christian University, Fort Worth, October, 1994, colloquium.
  69. Great Plains Operator Theory Symposium (GPOTS-1994), May 1994, University of Nebraska, one of eight main speakers.
  70. East Carolina University, Greenville, NC, November 1994, colloquium.
  71. North Carolina Functional Analysis Conference, Greenville, NC, November 1994, the main speaker.
  72. American Mathematical Society Meeting (Special Session), San Francisco, January, 1995, 20 min.
  73. South Eastern Analysis Meeting (SEAM), Atlanta, GA, March 1995, one of four main speakers. (The others were R. Curto, P. Duren and C. Foias.)
  74. University of Alabama, Tuscaloosa, April 1995, colloquium.
  75. NSF-sponsored Conference on "Control Theory and Math. Analysis", Tuscaloosa, AL, April 1995, 30 min.
  76. Great Plains Operator Theory Symposium (GPOTS-1995), Cincinnati, OH, May 1995, 20 min.
  77. University of North Carolina, Charlotte, April 1995, colloquium.
  78. University of Wisconsin, Superior, November 1995, colloquium.
  79. American Mathematical Society Annual Meeting (Special Session), Orlando, FL, January 1996, 20 min.
  80. University of North Carolina, Charlotte, April 1996, colloquium.
  81. Center for Approximation Theory Annual Symposium, College Station, TX, April 1996, 40 min.
  82. Great Plains Operator Theory Symposium (GPOTS-1996), Phoenix, AZ, May 1996, 20 min.
  83. Conference on "Wavelet Theory and Relations with Operators", Charlotte, NC, sponsored by NSF and USAF, July 1996, one of four main speakers. (The others were John Benedetto, Charles Chui and Guido Weiss.)
  84. N.A.T.O. Advanced Study Institute on "Operator Algebras, Operator Theory, and Applications", Samos, Greece, August 1996, a main speaker.
  85. Washington University, St. Louis, November 1996, colloquium.
  86. Great Plains Operator Theory Symposium (GPOTS-1997), Kingston, Ontario, May 1997, 20 min. talk; (Note: This was the first joint GPOTS/COSY meeting.)

87. Shanghai Operator Algebra and Operator Theory Conference, Shanghai, China, July 1997, a main speaker.
88. Wabash Conference, Indianapolis, IN, September 1997, a main speaker.
89. Nanjing University, Nanjing, China, July 1997, colloquium.
90. Peking University, Beijing, China, July 1997, colloquium.
91. American Mathematical Society Meeting (Special Session), Baltimore, MD, January 1998. (I could not give this talk due to my father's death.)
92. American Mathematical Society Meeting (Special Session), Manhattan, KS, March 1998.
93. Canadian Operator Theory Symposium (COAS), Edmonton, Alberta, May 1998, a main speaker.
94. Washington University, St. Louis, March 1999, research seminar.
95. University of Houston, April 1998, colloquium.
96. University of Nebraska Centennial Mathematics Conference, Lincoln, April 1998, a main speaker.
97. Center of Approximation Theory Symposium, Texas A&M University, April 1998, 45 minute talk.
98. SUMIRFAS-1998, College Station, hour talk.
99. University of Wisconsin, Superior, September 1998, a research colloquium and a recruiting seminar.
100. University of New Hampshire, Durham, December 1998, colloquium.
101. American Mathematical Society, Special Session on Operator Algebras and their Applications, 20 min. talk, San Antonio, TX, January 1999.
102. University of North Carolina, Charlotte, February 1999, research seminar.
103. University of Toronto, Toronto, Ontario, March 1999, colloquium.
104. McMaster University, Hamilton, Ontario, March 1999, colloquium.
105. Vanderbilt University, Nashville, April 1999, colloquium.
106. SIAM (Society for Industrial and Applied Mathematics) Annual Meeting, Mini-Symposium on "Wavelets and their Applications", Atlanta, May 1999, 30 minute talk.
107. Canadian Operator Theory Symposium (COAS), Prince Edward Island, May 1999, (I was invited to be the main speaker and give 3 one-hour talks.)
108. Harmonic Analysis Conference (in honor of John Benedetto), College Park, MD, October 1999, 20 minute talk.
109. American Mathematical Society, Special Session, Charlotte, North Carolina, October 1999.
110. American Mathematical Society, Special Session, Washington, DC, January 2000.
111. University of Missouri, Columbia, MO, February 2000, colloquium.
112. North Carolina Functional Analysis Conference, East Carolina University, Greenville, NC, March 2000, one-hour talk.
113. Great Plains Operator Theory Symposium (GPOTS-2000), San Juan, Puerto Rico, May 2000, one of 12 main speakers.
114. International Workshop on Operator Theory and Applications (IWOTA), Bordeaux, France, June 2000, 45-min talk.

115. SPIE-2000 Annual Symposium, (International Society for Optical Engineering), Special Session, San Diego, CA, July 2000, 20-min talk.
116. American Mathematical Society, Special Session on “Pseudo-Differential Operators, Wavelet Transforms, and Related Topics”, Toronto, Ontario, September 2000, 20 min talk.
117. American Mathematical Society, Special Session on “Abstract Wavelet Theory”, San Francisco, CA, October 2000, 20 min talk.
118. Baylor University, Waco, TX, October 2000, colloquium.
119. American Mathematical Society, Special Session on “Operator Algebras and Their Representations”, Birmingham, AL, November 2000, 20 min talk.
120. American Mathematical Society, Special Session on “Wavelets, Frames, Sampling, and Time-Frequency Representations”, Birmingham, AL, November 2000, 20 min talk.
121. Iowa State University, Ames, IA, February 2001, colloquium.
122. Baylor University, Waco, TX, March 2001, colloquium.
123. Vanderbilt University, Nashville, TN, March 2001, colloquium. Plenary Address, Conference on Ideal Data Representation, Institute of Mathematical Analysis and its Applications (IMA), University of Minnesota, Minneapolis, April 2001.
124. 30 minute talk, Sampling Theory and Applications (SAMP TA), Orlando, FL, May 2001.
125. 30 minute ”short plenary” talk, Great Plains Operator Theory Symposium (GPOTS), University of New Hampshire, Durham, NH, June 2001.
126. Series of three lectures, Functional Analysis VII: a conference and postgraduate school on functional analysis, Inter-University Center, Dubrovnik, Croatia, September 17-26, 2001. Funding source: Conference Committee and a special supplement to my NSF grant. (Note: I canceled this trip due to the September 11 terrorist attacks.)
127. Plenary Address, International Workshop on Operator Algebra and Operator Theory, (supported by the Chinese Academy of Sciences), Linfen, China, October 2001. Funding source: Conference committee and a supplement to my NSF grant.
128. Peking University, Beijing, China, October 2001, colloquium.
129. Chinese Academy of Sciences, Beijing, China, October 2001, colloquium.
130. 20 minute session, American Mathematical Society, Special session on Operator Spaces, Operator Algebras, and Applications, Irvine, CA, November 2001.
131. University of Central Florida, Orlando, FL, December 2001, colloquium.
132. 20 minute session, American Mathematical Society, Special Session on Undergraduate Research Programs, San Diego, CA, January 2002.
133. University of North Carolina, Charlotte, March 2002, colloquium.
134. University of Central Florida, Orlando, March 2002, colloquium.
135. 20 minute session, American Mathematical Society, Special Session on Frames, Wavelets and Operator Theory, Atlanta, March 2002.
136. 30 minute talk, Southeastern Analysis Meeting (SEAM-2002), Chapel Hill, NC, March 2002.
137. University of Nebraska, Lincoln, April 2002, colloquium.
138. Plenary Address, Iowa-Nebraska Functional Analysis Seminar (INFAS), DeMoines, April 2002.

139. Plenary Address, Great Plains Operator Theory Symposium (GPOTS-2002), University of North Carolina, Charlotte, May 2002. Funding Source: Completely funded by conference committee.
140. Plenary Address, Slovenian Linear Algebra Conference, Bled, Slovenia, June 2002 (note: I canceled my participation in this to take care of an REU program at A&M).
141. Plenary Address, Romanian Operator Theory Conference (OT-19), Timisoara, Romania, June 2002. Funding Source: Local support by conference committee.
142. 30 minute talk, International Workshop on Operator Theory and Applications (IWOTA-2002), Blacksburg, VA, August 2002.
143. Plenary Address, International Conference on Abstract and Applied Analysis, Hanoi, Vietnam, August 2002. Funding Source: Local support by conference committee. I was also invited to be on the Scientific Committee. (This was a satellite conference of the 2002-International Congress of Mathematicians, held in Beijing.)
144. National University of Singapore, August 2002, colloquium.
145. 20 minute session, American Mathematical Society, Special Session on Wavelets, Frames and Operator Theory, Orlando, November 2002.
146. 20 minute session, American Mathematical Society, Special Session on Operator Algebras, Baltimore, January 2003.
147. Plenary Address, Southeastern Analysis Meeting (SEAM-2003), University of Tennessee, Knoxville, March 2003. Funding Source: Completely funded by conference committee.
148. Plenary Lecture, "Mars Workshop" on Wavelets, Frames and Operator Theory, (one of two principal expository speakers), Louisiana State University, March 2003. "
149. Series of three Lectures, Functional Analysis VIII, Dubrovnik, Croatia, June 2003. Funding Source: Local support by conference committee. (Note: I had to cancel this due to a family emergency.)
150. Baylor University, Waco, TX, September 2003, colloquium.
151. Seminar, FRG Workshop, Georgia Tech, October 2003.
152. Lecture and Problem Session, Oberwolfach, February 2004.
153. Louisiana State University, Baton Rouge, April 2004, colloquium.
154. 20 minute session, American Mathematical Society, Special Session on Frames and Applications, Houston, May 2004.
155. Series of three Lectures, Workshop on the Functional and Harmonic Analysis of Wavelets and Frames, (one of two principal speakers), National University of Singapore, August 2004. Funding Source: Completely funded by conference committee.
156. 20 minute session, American Mathematical Society, Special Session on Frames and Wavelets, Vanderbilt University, October 2004.
157. University of Houston, Houston, March 2005, colloquium.
158. Hour talk, Workshop on Group Theoretical Methods, Operator Theory, and non-orthogonal expansions, ESI Institute, Vienna, Austria, April 2005.
159. Plenary Address, Great Plains Operator Algebras Symposium (GPOTS-2005), University of Central Florida, Orlando, June 2005.
160. Hour talk, International Conference on Banach Algebras and Their Applications-2005, Bordeaux, France, July 2005.

161. 20 minute session, American Mathematical Society, Special Session on Recent Progress in Operator Algebras, University of Nebraska, Lincoln, NE, October 2005.
162. 20 minute session, American Mathematical Society, Special Session on Wavelets, Frames and Related Expansions, Eugene, Oregon, November 2005.
163. University of Cincinnati (two talks), Cincinnati, November 2005, colloquium.
164. University of Texas at San Antonio, San Antonio, November 2005, colloquium.
165. Keynote Talk, Fourth International Conference on Wavelet Analysis and Applications, Macau, China, December 2005, Funding Source: Local support by conference committee.
166. Institute of Mathematical Analysis [IMA] Discussion participant, Workshop on "New Mathematics and Algorithms for 3-D Image Analysis", University of Minnesota, Jan 9-12, 2006.
167. 20 minute session, American Mathematical Society, Special session on Frames and Wavelets, San Antonio, Jan 2006.
168. Speaker, February Fourier Talks, University of Maryland, Feb 16-17, 2006.
169. Louisiana State University, Baton Rouge, February 2006, colloquium.
170. Speaker, Workshop on Wavelets, Frames and Operator Theory, LSU. Baton Rouge, Feb 24-26, 2006.
171. Hour talk, "Wavelet Workshop", Washington University, St. Louis, April 3-7, 2006. Washington University, St. Louis, April 2006, colloquium.
172. Speaker, Workshop on Wavelets, Frames and Operator Theory, Vanderbilt University, April 28-30, 2006.
173. Speaker, Current Trends in Harmonic Analysis and its Applications: Wavelets and Frames, University of Colorado, Boulder, May 18-20, 2006.
174. 20 minute session, Great Plains Operator Theory Symposium [GPOTS], University of Iowa, May 23-28, 2006.
175. I was invited to give a plenary talk at [IWOTA-2006], held in Seoul, Korea, early August 2006, all expenses paid, but I had to cancel due to local Workshop and REU commitments.
176. I was invited to give an hour talk at an international conference on Frames and Wavelets at a national Math. Institute in Argentina, August 2006, but I had to cancel due to local workshop and REU commitments.
177. I was one of the organizers of, and led discussions in, the "American Institute of Mathematics" [AIM] Workshop on the "Kadison Singer Problem", Palo Alto, Sept 25-29, 2006.
178. 20 minute session, American Mathematical Society, Special session on "Recent results on operator algebras", University of Cincinnati, Oct 21-22, 2006.
179. Speaker, BIRS [Banff Centre] Workshop on "Operator methods in fractal analysis, wavelets and dynamical systems", Banff, Alberta, Canada, Dec 2-7, 2006.
180. 20 minute session, American Mathematical Society, Special session on "Frames and Wavelets in Harmonic Analysis, Geometry, and Applications", New Orleans, Jan 5-8, 2007.
181. University of Central Florida, Orlando, February 2007, colloquium

182. 20 minute session, Great Plains Operator Theory Symposium [GPOTS], University of Nebraska, May 15-20, 2007.

## REFeree ACTIVITIES

1. Reviewer of research proposals for: National Science Foundation Faculty Research Grants (Modern Analysis, Classical Analysis, Algebra, Applied Mathematics, Analysis), NSF Special Projects, Canadian NSERC Grants, U.S.-Israel Grants, International Science Foundation Long-Term Research Grants Program, National Security Agency, National Research Council COBASE Grants Program.
2. Reviewer for Mathematics Reviews
3. Journals Refereed for: J. Functional Analysis; Proceedings A.M.S.; Transactions A.M.S.; Memoirs A.M.S.; London Math. Soc. (Bulletin, Journal and Proceedings); Annals of Mathematics; Contemporary Math.; Proc. Symposia Pure Math.; Pacific J. Math.; Math. Scandia; Math. Annalen; Journal of Operator Theory; Journal of Math. Anal. and Appl.; Circuits and Systems; Journal of Integral Equations and Operator Theory; Indiana J. Math.; Michigan J. Math.; Illinois J. Math.; Duke J. Math.; Proc. GPOTS; Canadian Math. Soc. (Bulletin and Proceedings); Houston J. Math.; Oxford Quarterly J. of Math.; J. of Linear Algebra and Appl.; J. Reine Angew. Math. (Crelle's Journal); American J. Math.; International J. Math.; Mathematica Japonica; Archiv der Mathematik; J. Fourier Analysis & Appl.
4. Numerous Promotion and Tenure evaluations; numerous full-professor promotional letters of evaluation for other schools.

## VISITORS SPONSORED OR CO-SPONSORED (AT TAMU)

D. Pitts (1987, 1988, 1990, 1991, 1993, 1994), F. Gilfeather (1987, 1988, 1991, 1992, 1993), W. Wogen (1988, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997), R. Kadison (1988), I. Gohberg (1988), C. Pearcy (1988, 1989), D. Blecher (1988), V. Paulsen (1988, 1991), L. Fialkow (1989), S. Y. Sun (1988, 1989), D. Herrero (1989), V. Kaftal (1989, 1992, 1999), E. Katsoulis (1990, 1991, 1993, 1994, 1995, 1996, 1997, 1999), J. Orr (1990, 1991, 1994), C. Johnson (1989), A. Hopenwasser (1990, 1992), Gary Weiss (1991, 1992, 1993), M. Ptak (1991), R. Baker (1991), J. Peters (1991, 1993, 1994); V. Peller (1992); C. Foias (1992); A. Frazho (1992); X. Dai (1992, 1993, 1994, 1995, 1997); S. Lu (1992); A. Tannenbaum (1992); B. Russo (1992); S. Power (1993); A. Patterson (1993, 1994); W. Gong (1993); L. Ge (1993, 1994); Z. Pan (1993, 1994, 1995, 1996, 1997); H. Huang (1993, 1994), D. Timotin (1994, 1995), D. Hadwin (1995), E. Azoff (1995), B. Chevreau (1994, 1995), K. Coates (1994, 1995), R. Crist (1995, 1996), A. Donsig (1995), T. Hudson (1995), W. Li (1994, 1995), N. Young (1995), B. Solel (1993, 1994, 2000), M. Papadakis (1995, 1996, 1997, 1999, 2000), A. Katavolos (1994), J. Kraus (1994, 1995), B. Weinstock (1994), C. Burnap (1994), A. Lambert (1994), J. Campbell (1994), T. Hoover (1994), Y. Latushkin (1994), L. Ding (1994, 1995), N. Weaver (1996), I. Ionascu (1996, 1997), Guido Weiss (1997-Frontier's speaker), E. Hernandez (1997), G. Garrigos (1997), W. Zelazko (1997), P. Cazazza (1997, 1998), R.

Balan (1997, 1998, 1999), W. Arveson (1997-Frontier's speaker), M. Frank (1998, 1999), B. Defacio (1998), L. Peng (1999, 2000), L. Baggett (1999), J. Courter (1999), W.-S. Tang (1999, 2000), J. Gilbert (1999), K. Olsen (1999), D. Han (1999), P. Jorgensen (1999), E. Weber (1999), C. Heil (1999), O. Bratteli (1999), S. Schaffer (1999), Z. Landau (1999), A. Aldroubi (2000), V. Lomonosov (2000); M. Papadakis (2001); R. Harte (2001); A. Hopenwasser (2001). Since 2001, I have had numerous visitors, including visiting students, who have come as participants in our annual Workshop in Linear Analysis and Probability. It is a year-around workshop, funded by NSF.

## COMMITTEES

- (1) Promotional Committee (Full Professor), 1988-89.
- (2) Graduate Studies Committee, 1990-91.
- (3) TAMU Faculty Senate, 1991-94.
- (4) Promotion and Tenure Committee, 1992-94.
- (5) TAMU Faculty Development Leave Committee, 1993-96.
- (6) TAMU Ombudsperson Advisory Council for Faculty Issues, 1993-96.
- (7) Calculus Exam Committee, Fall 1994, Fall 1995.
- (8) TAMU Double Degree/Double Major/Second Degree Subcommittee, 1995-96. (Note: This university-wide committee was created to implement a new (1996) regulation permitting a double major by most undergraduates at TAMU, including Mathematics majors. This regulation was passed by the Faculty Senate in response to a proposal which I personally initiated, and which I and P. Yasskin brought forward to the Academic Affairs subcommittee of the Senate.)
- (9) Promotional Committee (Full Professor), 1996-98, Chair 1996-97.
- (10) Qualifying Exams Committee, numerous times.
- (11) TAMU Minors Committee, 1996-97.
- (12) Undergraduate Program Committee, Sept. 1997-99.
- (13) Math. 220 sub-committee, Spring 1998.
- (14) Math. 409-410-447 sub-committee, Chair, Spring 1999.
- (15) Executive Committee, Oct. 1998-Oct. 2000.
- (16) Graduate Program Committee, Oct. 2000-2002.
- (17) Director of Undergraduate Studies, July 2001-August 2003 and again Aug 2006 - present.
- (18) Chair, Organizing Committee, GPOTS-2004, held at Texas A&M University, May 2004.
- (19) Member Mathematics Honors Committee, Sept 2004-present.

## OTHER SERVICE

1. I am currently serving as an "Aggie Access Namesake", fall-spring 2007-2008.
2. I conducted a seminar at TAMU on writing NSF research proposals in September 1992, 1993, 1994, 1995.
3. I was an invited participant in a focus discussion on "Research (and NSF funding) Priorities in Mathematics", sponsored by the AMS Committee on Science Policy, held during the AMS Winter meeting, Orlando, January 1996.
4. Invited participant in an NSF discussion group on "New Mathematics Institutes", Winter AMS Meeting, Washington, D.C., January 2000.
5. Invited participant in an AMS discussion group on "Conference Organization", Winter AMS Meeting, Washington, D.C., January 2000.
6. I was elected Chair of the group of 8 PI's for the NSF [FRG] grant "Wavelets, Frames and Operator Theory". My duties were to coordinate and oversee the research of the group.
7. Mentored two postdocs: Eric Weber (2000-2002) and Keri Kornelson (2002-2004). Both participated in my research group of undergrad students, grad students, postdocs, and colleagues. Both also assisted me in mentoring my summer REU program each year. Weber is currently an Assistant Professor at Iowa State University. Kornelson is currently an Assistant Professor at Grinnell College, Iowa.
5. Gave a "Grant proposal writing seminar" for young faculty and postdocs at TAMU, giving "pointers" for writing NSF grants, nearly every September from 1992-2003.
5. Served as a member of NSF proposal review panels several times over the past 10 years, meeting at the NSF headquarters in Arlington.
5. Consultant on developing the graduate program and research profile of the Mathematics Department at Baylor University.

## GRADUATE STUDENTS ADVISED

1. Ph.D. current student of Larson: Mrs. Nga Nguyen has passed all her qualifying examinations and completed all her course work for the Ph.D. She is currently writing her thesis.
2. Ph.D. graduates of Larson:
  - (1) Xingde Dai (1990), first position: University of North Carolina, Charlotte, (tenure-track); Currently a Full Professor at UNCC.
  - (2) Timothy Hudson (1992), first position: University of Waterloo, (2-year postdoc); Currently Chairman of the Math. Dept. at Southeastern Louisiana University.
  - (3) Allan Donsig (1993), first position: University of Lancaster, England, (NSERC postdoc with permission to leave Canada); Currently an Associate Professor at the University of Nebraska, Lincoln.
  - (4) Keith Coates (1993), first position: Illinois Wesleyan University; (thesis directed jointly with R.R. Smith); Currently an Associate Professor at Drury University, Springfield, MO.

(5) Randall Crist (1993), first position: Creighton University, (tenure-track); (thesis directed jointly with R.R. Smith); Currently an Associate Professor at Creighton University, Omaha.

(6) Vishnu Kamat (1997); He is presently with Motorola Corp., Austin.

(7) Shijin Lu (1997); He is presently with I.N.S.O. Corporation, Providence, RI.

(8) Deguang Han (1998); first position: 2-year postdoctoral fellowship at McMaster University; Currently an Associate Professor at the University of Central Florida, Orlando.

(9) Qing Gu (1998); first position: Visiting Assistant Professor at UNC-Charlotte; Next position a postdoctoral fellow at Peking University; Currently an Associate Professor at East China Normal University, Shanghai.

(10) Xiaofei Zhang (2001); Sophie has worked in industry in Dallas since she graduated, because her husband graduated with a Ph.D. in Chemistry from A&M in 2000 and is employed in a Dallas firm. She is active in academic research, and she and I have recently written a research article.

(11) Troy Henderson (2005); first position: a named postdoctoral fellowship at West Point Military Academy; Currently an Assistant Professor at the University of Mobile.

### 3. Work with graduate students of others:

(1) In a topics course which I taught in 1988, two of William Johnson's Ph.D. students (Alvaro Arias and Jeff Farmer) accomplished some original research on nests in Banach spaces for a class project in response to open questions I raised. This work was published (jointly by the two of them) in Transactions AMS and formed part of their dissertations under Johnson. I served as a member of both students' Ph.D. committees.

(2) In a seminar course which I taught in 1994, a student of William Johnson (Darrin Speegle) accomplished some original research on wavelets for a class project in response to my questions. This work was submitted for publication (solo) by Speegle, and formed a part of his dissertation under Johnson. It appeared in the Proceedings of the AMS. Subsequently, Speegle joined Xingde Dai and myself in a joint paper beyond this class project. I served as a member of Speegle's Ph.D. committee.

(3) In a seminar course which I taught in 1995, a student of Carl Pearcy (Eugene Ionascu) solved an open question which I raised on operator-theoretic wavelet theory. This was the starting point of a joint paper with Ionascu, Pearcy and myself, separate from his thesis, which has appeared in the Journal of Functional Analysis, and another which has appeared in the Journal of Fourier Analysis and Applications. I served as a member of Ionascu's Ph.D. committee.

### 3. Other graduate student activity:

(1) I was the Outside Examiner for the Ph.D. Dissertation of Zongyao Wang (1990), Arizona State University. I knew his thesis advisor, Domingo Herrero, very well. ASU covered all my expenses.

(2) I was the Outside Examiner for the Ph.D. Dissertation of Houben Huang (1993), Univ. of Waterloo. I knew his thesis advisor, Ken Davidson, very well. UW covered all my expenses.

- (3) In the past two years, I've served as the Outside Examiner for the Ph.D. Dissertations of three students at the University of Houston. I know their thesis advisor, Vern Paulsen, very well. UH covered all my expenses.
- (4) I've taught graduate topics/seminar courses on Banach algebras, nest algebras, reflexivity theory,  $C^*$ -algebras and von Neumann algebras, triangular operator algebras, wavelet theory, and frame theory.
- (5) I've served on 45 Ph.D. committees and Masters committees at TAMU in addition to those which I chaired, including 13 Ph.D. and 12 Masters committees in other departments.

## EDITORIAL WORK

1. Associate Editor, Proceedings of the American Mathematical Society, two four-year terms, February 1, 1997-Feb 1, 2005, about 900 papers were handled by me as editor.
2. Editorial Committee Member currently on six journals: "Operators and Matrices" (published by "Element"); "Involve" (a new journal with the stated purpose of publication of high quality research articles that have at least one-third student involvement at the undergraduate and graduate level); International Journal of Pure and Applied Mathematics; International Journal for Rapid Publication in Mathematics; Global Journal of Applied Mathematics; International Journal of Applied Mathematical Sciences.
3. Edited (jointly with L. Baggett) "The functional and harmonic analysis of wavelets and frames", Contemporary Mathematics 247, American Math. Society, Providence, 1999, 306 pp.
4. C. Heil, P. Jorgensen and D. Larson (eds.), Wavelets, Frames and Operator Theory, Contemporary Math., Vol. 345, American Math. Society, Providence, RI, 2004.
5. H. Feichtinger, P. Jorgensen, D. Larson, G. Olafsson (eds.), Wavelets, Frames and Operator Theory, formal report volume on the Oberwolfach mini-workshop we organized in Feb. 2004.
6. D. Han, P. Jorgensen, D. Larson (eds), Proceedings of the Great Plains Operator Theory Symposium 2005, Contemporary Math., vol. 414, American Math. Society, Providence, RI, 2006.
7. D. Larson, P. Massopust, C. Nguyen, Z. Nashed, M. Papadakis, A. Zayed (eds), Frames and operator theory in Analysis and Signal Processing, Contemporary Math., A.M.S., in press.

## ORGANIZATIONAL ACTIVITIES

1. Organized a Special Session on "Nest Algebras" in the 1981 International Conference on the Mathematical Theory of Networks and Systems (MTNS), Santa Monica, July 1981.
2. Financial coordinator (1984-2004) for the series of Annual Great Plains Operator Theory Symposia. Starting in 2005, NSF has requested separate Conference Proposals for GPOTS. Each year I have assisted the local organizers, and I have regularly chaired the annual GPOTS Steering Committee Meeting. I am currently a member of the Scientific Committee for GPOTS.

3. Organized a NSF-CBMS Regional Conference “Operator Theory, Analytic Functions, Matrices, and Electrical Engineering” with J. W. Helton as the main speaker, August 1985, University of Nebraska.
4. Organized a Special Session on “Triangularity in Operator Algebras” in the 1989 Fall Central Regional Meeting of the AMS, Muncie, Indiana, October, 1989.
5. Organizing Committee (Chair) 1991 GPOTS conference, which was held May 15-18 at TAMU.
6. Organized a Mini-Conference on “Operator-Theoretic Control Theory” at TAMU, with Mathematics and Engineering participation from 6 other universities, in conjunction with C. Foias’ Frontiers talks, November, 1992.
7. Organized a Special Session on “Operator Theory and Triangular Operator Algebras” (joint with Raul Curto) in the 1993 Annual Winter Meeting of the AMS, San Antonio, Texas, January, 1993.
8. Organized a Special Session on “Nonselfadjoint Operator Algebras” in the 1993 Fall Central Regional Meeting of the AMS, College Station, Texas, October, 1993.
9. Organized the 1995 edition of SUMIRFAS in August, 1995, College Station, and co-organized an associated banquet in honor of Carl Pearcy on the occasion of his sixtieth birthday.
10. Organized a Special Session (jointly with L. Baggett) on “The functional and harmonic analysis of wavelets and frames” in the 1999 annual winter meeting of the AMS, San Antonio, Texas, January 1999.
11. Organized a “Concentration Week on Wavelets and Frames” at Texas A&M, July 1999, part of our Linear Analysis and Probability Workshop, over 20 participants from 5 countries.
12. I made a pre-organizational trip to SPIE-1999 in anticipation of running a special session the following year, Denver, July 1999.
13. Organized a Special Session on “The functional analysis of wavelets” in a conference within the symposium SPIE-2000, (the Annual Meeting of the International Society for Photo-Optical Engineering), San Diego, July 30-Aug. 4, 2000.
14. Invited participant in AMS discussion group on “Conference organization”, Winter AMS Meeting, Washington, D.C., January 2000.
15. Organized another Special Session, similar to the 2000-edition, in SPIE-2001, San Diego, July 29-August 3, 2001.
16. Organized a Special Session on “Wavelets and Frames” in IWOTA-2002, Blacksburg, VA, August 2002.
17. Part organizer, and participant as a member of the focused research group [FRG] , for a series of FRG workshops since July 2002: July 2002, Texas A&M, College Station; January 2003, Univ. Maryland, College Park; March 2003, LSU, Baton Rouge; May 2003, Vanderbilt U., Nashville; July 2003, U. Colorado, Boulder; October 2003, Ga. Tech, Atlanta.; February 2004, Oberwolfach, Germany; April 10-15, 2005, Vienna, Austria.
18. Organized a mini-workshop entitled “Wavelets, Frames and Operator Theory” at the Oberwolfach Mathematics Institute, Germany, Feb. 2004. I was a co-organizer of this event, along with H. Feichtinger, P. Jorgensen and G. Olafsson. We had about 25

participants.

19. Co-organizer (with W. Johnson, G. Pisier and J. Zinn) of the annual summer "Workshop in Analysis and Probability", Texas A&M University, July-August each year, and the associated weekend conference "SUMIRFAS".
20. Organized a "Concentration Week on Wavelets, Frames and Operator Theory" at Texas A&M, July 2002, part of our annual summer Linear Analysis and Probability Workshop. There were over 30 participants from 7 countries. "
21. Sponsored a "Frontiers in Mathematics Speaker", John Benedetto (U. Maryland), for a week in April 2002, and I ran an associated miniconference on "Wavelets, frames and operator theory" on the following weekend, with participants from 10 different universities.
22. I was invited to serve on the Scientific Committee for the ICM (International Congress of Mathematicians) Satellite Conference "Abstract and Applied Analysis", Hanoi, Vietnam, August 2002.
23. I have organized many mini-workshops at TAMU since 1987, on various topics, varying between 3 and 12 participants. Since 1990 these have been in connection with the ongoing Linear Analysis and Probability Workshop.

## PUBLICATIONS

1. On certain reflexive operator algebras, Ph.D. Thesis, U.C. Berkeley, December 1976, directed by W. Arveson.
2. On the structure of certain reflexive algebras, *J. Funct. Anal.* 31 (1979), 275-292.
3. The carrier space of a reflexive operator algebra (with A. Hopenwasser), *Pacific J. Math.* 81 (1979), 417-434.
4. Nest subalgebras of von Neumann algebras (with F. Gilfeather), *Advances in Mathematics* 46 (1982), 171-199.
5. Nest subalgebras of von Neumann algebras: Commutants modulo compacts and distance estimates (with F. Gilfeather), *J. Operator Theory* 7 (1982), 279-302.
6. Commutants modulo the compact operators of certain CSL algebras (with F. Gilfeather), *Topics in modern operator theory*, vol. 2 (1981), Birkhauser, 105-120.
7. Structure in reflexive subspace lattices (with F. Gilfeather), *J. London Math. Soc.*, 26 (1982), 117-131.
8. Annihilators of operator algebras, *Topics in modern operator theory*, vol. 6 (1982), Birkhauser, 119-130.
9. A solution to a problem of J. R. Ringrose, *Bulletin (New Series) A.M.S.* 7 (1982), 243-246.
10. Commutants modulo the compact operators of certain CSL algebras II (with F. Gilfeather), *Integral Eq. and Operator Theory*, 6 (1983), 345-356.

11. Nest subalgebras of von Neumann algebras: commutants modulo the Jacobson radical (with F. Gilfeather), *J. Operator Theory*, 10 (1983), 95-118.
12. Reflexive algebras with finite width lattices: tensor products, cohomology, compact perturbations (with F. Gilfeather and A. Hopenwasser) *J. Funct. Anal.* 55 (1984), 176-199.
13. Some applications of a technique for constructing reflexive operator algebras, (with J. Kraus), *J. Operator Theory* 13 (1985), 227-236.
14. Nest algebras and similarity transformations, *Annals of Math.* 121 (1985), 409-427.
15. Reflexivity and distance formulae, (with J. Kraus), *Proc. London Math. Soc.* 53 (1986), 340-356.
16. Hyperreflexivity and a dual product construction, *Transactions of A.M.S.* 294 (1986), 79-88.
17. Nests and inner flows (with B. Solel), *J. Operator Theory* 16 (1986), 157-164.
18. Reflexivity, algebraic reflexivity, and linear interpolation, *American J. Math.* 110 (1988), 283-299.
19. Triangularity in operator algebras, *Pitman Research Notes in Mathematics Series* 192 (1988), 121-188.
20. On similarity of nests in Hilbert space and in Banach spaces, *Springer-Verlag Lecture Notes in Mathematics Series* 1332 (1988), 179-194.
21. Bimodules of nest subalgebras of von Neumann algebras (with B. Solel), *Operator Theory: Adv. and Appl.* 32 (1988), Birkhauser Verlag Basel, 159-180.
22. Local derivations and local automorphisms of  $B(X)$  (with A. Sourour), *Proc. Symposia in Pure Math.* 51 (1990), 187-194.
23. Similarity of nests in  $L_1$  (with G.D. Allen, J. Ward, G. Woodward), *J. Funct. Anal.* 92 (1990), 49-76.
24. Some recent progress in nest algebras, *Proc. Symposia Pure Math.* 51 (1990), 333-346.
25. Reflexivity properties of  $T \oplus O$  (with W. Wogen), *J. Funct. Anal.* 92 (1990), 448-467.
26. Idempotents in nest algebras (with D. Pitts), *J. Funct. Anal.*, 97 (1991), 162-193.
27. Some problems on triangular and semitriangular operators (with W. Wogen), *Contemporary Mathematics*, 120 (1991), 97-100.
28. Some questions concerning nest algebras (with D. Pitts), *Contemporary Mathematics*, 120 (1991), 89-96.
29. Semitriangular operators (with D. Herrero and W. Wogen), *Houston J. Math.* 17 (1992), 477-499.

30. Quasitriangular subalgebras of semifinite von Neumann algebras are closed (with V. Kaftal, G. Weiss), *J. Funct. Anal.* 107 (1992), 387-401.
31. Two results on separating vectors (with W. Gong and W. Wogen), *Indiana Math. Journal* 43 (1994), 1159-1165.
32. Extensions of Normal Operators (with W. Wogen), *Integral Equations and Operator Theory* 20 (1994), 325-334.
33. Preannihilators, The operator approximation property, and dual products (with J. Kraus), *J. Operator Theory*, 36 (1996), 21-43.
34. Extensions of bitriangular operators (with W. Wogen), *Integral Equations and Operator Theory*, 25 (1996), 216-223.
35. Wavelet sets in  $\mathbf{R}^n$  (with X. Dai and D. Speegle), *J. Fourier Analysis and Applications*, 4 (1997), 451-456.
36. Structured triangular limit algebras (with B. Solel), *Proc. London Math. Soc.*, 75 (1997), 177-193.
37. Extreme points in triangular UHF algebras (with T. Hudson and E. Katsoulis), *Transactions A.M.S.*, 349 (1997), 3391-3400.
38. Von Neumann Algebras and Wavelets, *Proc. NATO Adv. Studies Institute on Operator Algebras and Applications*, (1997) 267-312, Kluwer Academic Publishers.
39. "Wandering Vectors for Unitary Systems and Orthogonal Wavelets" (with X. Dai), *Memoirs American Math. Society.*, 134 (1998), No. 640.
40. Strong limits of similarities (with D. Hadwin), "Nonselfadjoint Operator Algebras, Operator Theory and Related Topics", *Operator Theory: Advances and Applications* 104(1998), Birkhauser, 139-146.
41. On the unitary systems affiliated with orthonormal wavelet theory in  $n$ -dimensions (with E. Ionascu and C. Pearcy), *J. Functional Analysis*, 157 (1998), 413-431.
42. Wavelet sets in  $\mathbf{R}^n - II$ , (with X. Dai and D. Speegle) *Contemporary Math.*, 216 (1998), 15-40.
43. Basic properties of wavelets (with the Wutam Consortium), *Journal of Fourier Analysis and Applications* 4(1998), 575-594. (The "Wutam Consortium" is a group led by Xingde Dai, Eugenio Hernandez, David Larson, and Guido Weiss, consisting of 14 researchers based at UNC-Charlotte, University of Madrid, TexasA&M University and Washington University, for the purpose of conducting basic research on the mathematics of wavelet and frame theory. At the time this was written, over half of the group of 14 were graduate students at the two universities.)
44. Frames and wavelets from an operator-theoretic point of view, *Contemporary Math.*, 228 (1998), 201-218.
45. On wavelet sets (with E. Ionascu and C. Pearcy), *J. Fourier Analysis and Applications*,

- 4(1998), 711-721.
46. A module frame concept for Hilbert  $C^*$ -modules (with M. Frank), Contemporary Math. 247(1999), 207-234.
  47. Frames for Banach spaces (with P. Casazza and D. Han) Contemporary Math. 247(1999), 149-182.
  48. Multiresolution analyses of abstract Hilbert spaces and wandering subspaces (with D. Han, M. Papadakis and Th. Stavropoulos), Contemporary Math. 247(1999), 259-284.
  49. "The Functional and Harmonic Analysis of Wavelets and Frames" (volume edited by L. Baggett and D. Larson), Contemporary Math., volume 247 (1999), American Math. Society, Providence.
  50. "Frames, Bases and Group Representations" (with D. Han), Memoirs American Math. Society 147(2000), No. 697, 94pp.
  51. Gabor frames and operator algebras (with J. Gabardo and D. Han), SPIE Proceedings Vol. 4119, "Wavelet Applications in Signal and Image Processing VIII (2000), 337-345.
  52. Modular frames for Hilbert  $C^*$ -modules and symmetric approximation of frames (with M. Frank), SPIE Proceedings Vol. 4119, "Wavelet Applications in Signal and Image Processing VIII" (2000), 325-336.
  53. Wandering vector multipliers for unitary groups (with D. Han), Transactions of the American Math. Soc. 353(2001), 2247-3370.
  54. Riesz wavelets and multiresolution structures (with W.-S. Tang and E. Weber), SPIE Proceedings Vol. 4478, "Wavelet Applications in Signal and Image Processing IX" (2001), 254-262.
  55. Frames in Hilbert  $C^*$ -modules and  $C^*$ -algebras (with M. Frank), J. Operator Theory 48(2002), 273-314.
  56. Direct paths of wavelets (with E. Azoff, E. Ionascu, and C. Pearcy), Houston J. Math. 29(2003), 737-756.
  57. Completely rank-nonincreasing linear maps (with D. Hadwin), Journal of Functional Analysis 199(2003), 210-227.
  58. Multiwavelets associated with countable groups of unitary operators in Hilbert spaces (with W.-S. Tang and E. Weber), International J. Pure and Appl. Math. 6(2003), 123-144.
  59. Extensions of operators (with D. Han, Z. Pan and W. Wogen), Indiana J. Math. 53(2004), 1151-1169.
  60. Approximation theory and matrix completions (with D. Hadwin and D. Timotin), Lin. Algebra and Appl. 377(2004), 165-179.
  61. Geometric aspects of frame representations of abelian groups (with A. Aldroubi, W.-S. Tang and E. Weber), Transactions Amer. Math. Soc. 356(2004), 4767-4786.
  62. Wavelets, Frames and Operator Theory (volume co-edited by C. Heil, P. Jorgensen

- and D. Larson), Contemporary Math. volume 345 (2004), American Math. Society, Providence.
63. Ellipsoidal tight frames (with K. Dykema, D. Freeman, K. Kornelson, M. Ordower and E. Weber), Illinois J. Math. 48(2004), 477-489. (This paper grew out of an REU project in Summer 2002. Dan Freeman was the undergraduate student whose summer REU project took off, and was eventually mentored collectively by the other five co-authors, resulting in this paper. Dan decided to come to A&M to work on a Ph.D. in Mathematics.)
  64. Rank-one decompositions of operators and construction of frames (with K. Kornelson), Contemporary Math. 345(2004), 203-214.
  65. Decomposition of operators and construction of frames, Proceedings of the Oberwolfach (Germany) Math. Institute Mini-Workshop on Wavelets, Frames and Operator Theory, published spring 2004.
  66. Skew exactness perturbations (with R. Harte), Proceedings A.M.S. 132(2004), 2603-2611.
  67. Robertson-type theorems for countable abelian groups of unitary operators (with W.-S. Tang and E. Weber), Contemporary Math. 414(2006), 289-295.
  68. Unitary systems and wavelet sets, Wavelet Analysis and Applications, Applied and Numerical Harmonic Analysis, Birkhauser Verlag Basel (2006), 143-171.
  69. Explicit cross sections of singly generated group actions, Harmonic Analysis and its Applications, Birkhauser Verlag Basel (2006), 209-230.
  70. Operator Theory, Operator Algebras, and Applications (volume co-edited by D. Han, P. Jorgensen and D. Larson), Contemporary Math., volume 414 (2004), American Math. Society, Providence.
  71. Separating vectors for operators (with D. Han, Z. Pan and W. Wogen), Proceedings A.M.S. 135(2007), 713-724.
  72. Unitary systems, wavelet sets. and operator-theoretic interpolation of wavelets and frames, Gabor and Wavelet Frames. Institute for Mathematical Sciences, National University of Singapore, World Scientific (2007), 166-214.
  73. Operator theory and modulation spaces (with C. Heil), Contemporary Math., to appear.
  74. Riesz bases and their dual modular frames in Hilbert  $C^*$ -modules), J. Math. Analysis Appl., to appear.
  75. Operator-valued frames on Hilbert  $C^*$ -modules (with V. Kaftal and S. Zhang), Contemporary Math., to appear.
  76. Coxeter groups and wavelet sets (with P. Massopust), Contemporary Math., to appear.
  77. Interpolation maps and congruence domains for wavelet sets (with X. Zhang), Rep-

resentations, wavelets and Frames, Birkhauser Verlag Basel, to appear (article in a book, 21 pp).

78. Frames and Operator Theory in Analysis and Signal Processing (volume co-edited by D. Larson, P. Massopust, Z. Nashed, M. Nguyen, M. Papadakis and A. Zayed) , Contemporary Math., American Math. Society, Providence, to appear.
79. Operator-valued frames (with V. Kaftal and S. Zhang), submitted for publication.
80. Duality properties for projective unitary representations (with D. Han), submitted for publication.
81. Three-way tiling sets in two dimensions (with P. Massopust and G. Olafsson), submitted for publication.
82. Patch and crossover planar dyadic wavelet sets (with A.J. Hergenroeder, Z. Catlin, and B. George), submitted for publication.
83. Frames for undergraduates (with D. Han, K. Kornelson and E. Weber), textbook to be published by the American Math. Society in their Student Mathematical Library, about 300 pages.