Curriculum Vitae – Michael M. Neumann – November 2018

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Education and appointments

1950	Born in Göttingen, Federal Republic of Germany
1968 – 1974	Studies of Mathematics and Physics, University of Saarbrücken, Germany
1973	Master of Science in Mathematics at Saarbrücken
1974	Doctor of Science at Saarbrücken (summa cum laude)
1979	Habilitation for Mathematics at the University of Saarbrücken
1973 – 1979	Assistant Professor, University of Saarbrücken
1979	Heisenberg Fellow of the German Science Foundation at Saarbrücken
1979 – 1987	Associate Professor, University of Essen, Germany
1987 – 1989	Professor, Southwest Missouri State University
1989 –	Professor, Mississippi State University
Aug. 2003 – June 2006	Interim Department Head, Department of Mathematics and Statistics
1980 – 1982	Visiting Professor, University of Osnabrück, Germany
Fall 1986	Visiting Associate Professor, California Institute of Technology
Spring 1987	Visiting Associate Professor, University of California at Los Angeles
Summer 1994 and 1998	Visiting Professor (research), University of Copenhagen, Denmark
Fall 1995	Visiting Professor (sabbatical), University of Copenhagen

Awards, distinctions, and highlights

- Honors Scholarship awarded by the German Honors Program *Studienstiftung des Deutschen Volkes* (1969 – 1973)
- *Outstanding Doctoral Dissertation Award* from the Alumni of the University of Saarbrücken (1974)
- *Heisenberg Fellowship* of the German Science Foundation at Saarbrücken, comparable to a Sloan Fellowship in the United States (1979)
- Award of the distinguished title *"Außerplanmäßiger Professor"* at the University of Essen (1985)
- *Fulbright Scholarship* to visit the California Institute of Technology and the University of California at Los Angeles (1986) - eventually declined
- *Outstanding Honors Faculty Member* in the University Honors Program at MSU (1992)
- Invited one-hour address "*Recent Developments in the Local Spectral Theory of Operators on Banach Spaces"* to the Danish Mathematical Society at the Annual Meeting in Copenhagen (1993)
- Inducted as one of the first members of *Duggar's BEST* in the program "Bettering Education through Students and Teachers" at MSU (1994)
- Invited panelist of the one-hour panel discussion "*Innovative Ideas for Teaching Mathematics"* at the 72 nd Annual Meeting of the Louisiana - Mississippi Section of the Mathematical Association of America at Biloxi (1995)
- Organizer of a special session on *"Banach Algebras"*, jointly with John Duncan, at the 103 rd Annual National Meeting of the American Mathematical Society in San Diego, California (1997)
- Invited poster presentation *"Student Research Projects in Multivariate Calculus"* in the NSF poster session of the Joint Mathematics Meetings in San Diego (1997)

- Short-term visiting professorship at the University of Palermo, Italy (Oct. 1998)
- Year 1999 MSU Alumni Association Lower Level Teaching Award
- Year 2000 College of Arts and Sciences Faculty Research Award at MSU
- Year 2001 Carnegie Foundation for the Advancement of Teaching (CFAT) and Council for Advancement and Support of Education (CASE) *Mississippi Professor of the Year* Award
- Invited panelist of the ninety-minute panel discussion *"On the Current State of and Future Research Trends in Function Spaces"* at the Fourth Conference on *"Function Spaces"*, Southern Illinois University at Edwardsville (2002)
- Organizer of a one-month summer enhancement program at MSU for high school students of the *Algebra Project* guided by Robert P. Moses (2005)
- Dean's Eminent Scholar of Mathematics Award, College of Arts and Sciences at MSU (2006)
- Short-term visiting professorship at the University of Palermo, Italy (April – May 2007)
- Organizer of a conference in honor of Kjeld Bagger Laursen entitled *"Banach Algebras and Local Spectral Theory",* jointly with H. Garth Dales and Niels Grønbæk, at the University of Copenhagen, Denmark (2008)
- Member of the Editorial Board of the *Banach Journal of Mathematical Analysis* (2010 – 2015)
- Dr. Nino A. Bologna Award – StatePride Award at MSU (2010)
- College of Arts and Sciences Researcher of the Month at MSU (2012 & 2013)

List of publications

Monographs

1. with Heinz König: *Mathematische Wirtschaftstheorie mit einer Einführung in die konvexe Analysis* (mathematical economics with an introduction to convex analysis). Math. Syst. in Economics, Vol. **100**. Verlag Anton Hain / Athenäum, Kõnigstein (Germany) 1986, 239+x p.

   Reviewed in Math. Reviews MR 87k : 90001, Zentralblatt für Mathematik Zbl591.90001, Jahresbericht der Deutschen Mathematiker-Vereinigung (DMV) **90** (1988), 50–52, and Journal of Inst. and Theor. Economics (JITE) **143** (1987), 509–511.

2. with T. Len Miller: *Mathematica projects for vector calculus.* Kendall / Hunt Publishing Company, Dubuque (Iowa) 1996, second printing 1999, 167+viii p.

   Reviewed in Amer. Math. Monthly **104** (1997), 584–585.

3. with Kjeld B. Laursen: *An introduction to local spectral theory.* Clarendon Press - Oxford University Press, London Math. Society Monographs Series No. **20**. Oxford (England) 2000, 591+xii p.

   Reviewed in Math. Reviews as *Featured Review* MR 2001k : 47002, Zentralblatt für Mathematik Zbl 957.47004, European Mathematical Society (EMS), Dec. 2000, 39, Journal of Operator Theory **48** (2002), 455–459, and Acta Scientiarum Mathematicarum (Szeged) **67** (2001), 900–902.

Dissertation

4. *Ein allgemeiner Satz über gleichmäßige Beschränktheit* (a general theorem on uniform boundedness). Doctoral Dissertation, University of Saarbrücken (Germany) 1974, 49 p.

Articles

5. Beschränktheitsaussagen für sublineare und bisublineare Funktionale. *Arch. Math. (Basel)* **27** (1976), 539–548. Reviewed in Math. Reviews: MR 58 # 30055.

6. Varianten zum Konvergenzsatz von Simons und Anwendungen in der Choquettheorie. *Arch. Math. (Basel)* **28** (1977), 182–192. MR 56 # 3232.

7. Exposé zum Desintegrationssatz von Strassen. *Functional Analysis Seminar Notes,* University of Saarbrücken (1977), 1–17.

8. Bemerkungen zum von Neumannschen Minimaxtheorem. *Arch. Math. (Basel)* **29** (1977), 96–105. MR 57 # 3937.

9. On the Strassen Disintegration Theorem. *Arch. Math. (Basel)* **29** (1977), 413–420. MR 57 # 16533.

10. On Choquet's theory. In: *Proceedings of the 5 th Winter School on Abstract Analysis.* Z. Frolík (editor). Math. Inst. Czech. Acad. Sci., Prague (1977), 69–71.

11. Continuity of sublinear operators on F-spaces. *Manuscripta Math.* **26** (1978), 37–61. MR 80c : 47047.

12. with Benno Fuchssteiner: Small boundaries. *Arch. Math. (Basel)* **30** (1978), 613–621. MR 80d : 46043.

13. with Ernst Albrecht: Über die Stetigkeit von dissipativen linearen Operatoren. *Arch. Math. (Basel)* **31** (1978), 74–88. MR 80f : 47030.

14. Automatic continuity of translation-invariant linear operators. In: *Proceedings of the 6 th Winter School on Abstract Analysis.* Z. Frolík (ed.). Math. Inst. Czech. Acad. Sci., Prague (1978), 67–70.

15. with Ernst Albrecht: Automatische Stetigkeitseigenschaften einiger Klassen linearer Operatoren. *Math. Ann.* **240** (1979), 251–280. MR 82f : 47052.

16. Automatic continuity of linear operators. In: *Functional Analysis: Surveys and Recent Results II.* K. - D. Bierstedt and B. Fuchssteiner (editors). North-Holland Math. Studies **38** (1980), 269–296. MR 81j : 47006.

17. with Ernst Albrecht: Automatic continuity of generalized local linear operators. *Manuscripta Math.* **32** (1980), 263–294. MR 81m : 46024.

18. Automatic continuity of operational calculi on algebras of differentiable functions. In: *Proceedings of the 8 th Winter School on Abstract Analysis.* Z. Frolík (editor). Math. Inst. Czech. Acad. Sci., Prague (1980), 124–127.

19. with Ernst Albrecht: On the continuity of non-analytic functional calculi. *J. Operator Theory* **5** (1981), 109–117. MR 82m : 47013.

20. with Ernst Albrecht: Stetigkeitsaussagen für Homomorphismen zwischen topologischen Algebren. *Functional Analysis Seminar Notes,* University of Saarbrücken (1981), 1–32.

21. with Ernst Albrecht: Local operators between spaces of ultradifferentiable functions and ultradistributions. *Manuscripta Math.* **38** (1982), 131–161. MR 83i : 46041.

22. A maximality theorem concerning extreme points. *J. Math. Anal. Appl.* **96** (1983), 148–152. MR 84j : 46014.

23. On flows in generalized networks. In: *Proceedings of the 8 th Conference on Operator Theory.* D. Gaşpar and M. Reghiş (editors). Timişoara and Herculane, Romania (1983), 56–60.

24. with Ernst Albrecht: Automatic continuity for operators of local type. In: *Radical Banach Algebras and Automatic Continuity.* J. M. Bachar et al. (editors). Springer Lecture Notes in Math. **975** (1983), 342–355. MR 85h : 47019.

25. with Ernst Albrecht: Continuity properties of C^k-homomorphisms. In: *Radical Banach Algebras and Automatic Continuity.* J. M. Bachar et al. (editors). Springer Lecture Notes in Math. **975** (1983), 356–374. MR 85d : 46067.

26. Flows in infinite networks. *Rend. Circ. Mat. Palermo (2) Suppl.* **3** (1984), 201–208. MR 85k : 90076.

27. Convex operators into webbed spaces. *Arch. Math. (Basel)* **42** (1984), 366–370. MR 85h : 46012.

28. A Ford–Fulkerson type theorem concerning vector-valued flows in infinite networks. *Czech. Math. J.* **34** (1984), 156–162. MR 85h : 90049.

29. Decomposable operators, divisible subspaces, and problems of automatic continuity. In: *Proceedings of the 9 th Conference on Operator Theory.* D. Gaşpar and M. Reghiş (editors). Timişoara and Herculane, Romania (1984), 72–75.

30. with Vlastimil Pták: Uniform boundedness and automatic continuity. In: *Proceedings of the 9 th Conference on Operator Theory.* D. Gaşpar and M. Reghiş (editors). Timişoara and Herculane, Romania (1984), 76–80.

31. An application of fixed-point theory to equilibrium analysis. *Rend. Circ. Mat. Palermo (2) Suppl.* **5** (1984), 83–94. MR 86h : 90022.

32. Uniform boundedness and closed graph theorems for convex operators. *Math. Nachr.* **120** (1985), 113–125. MR 86m : 46008.

33. The theorem of Gale for infinite networks and applications. In: *Infinite Programming.* E. J. Anderson and A. B. Philpott (editors). Springer Lecture Notes in Economics and Math. Systems **259** (1985), 154–171. MR 87f : 90052.

34. with Vlastimil Pták: Automatic continuity, local type and causality. *Studia Math.* **82** (1985), 61–90. MR 87e : 47026.

35. On the spectral maximal spaces of certain decomposable operators. In: *Proceedings of the 10 th Conf. on Operator Theory.*D. Gaşpar and M. Reghiş (editors). Bucharest, Romania (1985), 87–91.

36. with Ernst Albrecht and Jörg Eschmeier: Some topics in the theory of decomposable operators. In: *Advances in Invariant Subspaces and Other Results of Operator Theory.* R. G. Douglas et al. (editors). Operator Theory: Advances and Applications **17**. Birkhäuser, Basel (1986), 15–34. MR 89c : 47046.

37. with Kjeld B. Laursen: Decomposable operators and automatic continuity. *J. Operator Theory* **15** (1986), 33–51. MR 87c : 47051.

38. Decomposable operators and generalized intertwining linear transformations. In: *Special Classes of Linear Operators and Other Topics.* H. Helson et al. (editors). Operator Theory: Advances and Applications **28**. Birkhäuser, Basel (1988), 209–222. MR 89f : 47049.

39. Some unexpected applications of the sandwich theorem. In: *Proceedings of the Conference on Optimization and Convex Analysis at the University of Mississippi.* P. Kranz (editor). Oxford, Mississippi (1989), 22–38. MR 91j : 90091.

40. with Philip C. Curtis, Jr.: Non-analytic functional calculi and spectral maximal spaces. *Pacific J. Math.* **137** (1989), 65–85. MR 90h : 47059.

41. On the Mazur–Orlicz theorem. *Czech. Math. J.* **41** (1991), 104–109. MR 92d : 46122.

42. with Kjeld B. Laursen: Automatic continuity of intertwining linear operators on Banach spaces. *Rend. Circ. Mat. Palermo (2)* **40** (1991), 325–341. MR 94f : 46063.

43. Generalized convexity and the Mazur–Orlicz theorem. In: *Proceedings of the Orlicz Memorial Conference at the University of Mississippi.* P. Kranz and I. Labuda (editors). Oxford, Mississippi (1991), 69–83.

44. Commutative Banach algebras and decomposable operators. *Monatsh. Math.* **113** (1992), 227–243. MR 93e : 46056.

45. with Kjeld B. Laursen: Decomposable multipliers and applications to harmonic analysis. *Studia Math.* **101** (1992), 193–214. MR 93a : 46102.

46. Banach algebras, decomposable convolution operators, and a spectral mapping property. In: *Function Spaces.* K. Jarosz (editor). Lecture Notes in Pure and Applied Mathematics **136**. Marcel Dekker, New York (1992), 307–323. MR 93e : 46057.

47. with Kjeld B. Laursen: Local spectral properties of multipliers on Banach algebras. *Arch. Math.* **58** (1992), 368–375. MR 93e : 46058.

48. with Kjeld B. Laursen: Asymptotic intertwining and spectral inclusions on Banach spaces. *Czech. Math. J.* **43** (1993), 483–497. MR 94k : 47007.

49. with Vivien G. Miller: Local spectral theory for multipliers and convolution operators. In: *Algebraic Methods in Operator Theory.* R. E. Curto and P. E. T. Jørgensen (editors). Birkhäuser, Boston (1994), 25–36. MR 95m : 43004.

50. with Kjeld B. Laursen: On analytic solutions of the equation $(T - \lambda)f(\lambda) = x$. In: *Seminar Notes in Functional Analysis and Partial Differential Equations,*Louisiana State University, Baton Rouge (1994), 256–265.

51. Sandwich theorems for operators of convex type. *J. Math. Anal. Appl.* **188** (1994), 759–773. MR 95m : 46006.

52. with Robert Kantrowitz: The greatest regular subalgebra of certain Banach algebras of vector-valued functions. *Rend. Circ. Mat. Palermo (2)* **43** (1994), 435–446. MR 96f : 46101.

53. with Kjeld B. Laursen: Local spectral theory and spectral inclusions. *Glasgow Math. J.* **36** (1994), 331–343. MR 95k : 47002.

54. Local spectral theory for operators on Banach spaces and applications to convolution operators on group algebras. In: *Seminar Notes in Functional Analysis and Partial Differential Equations,* Louisiana State University, Baton Rouge (1994), 287–308.

55. with Robert Kantrowitz: On certain Banach algebras of vector-valued functions. In: *Function Spaces - The Second Conference.* K. Jarosz (editor). Lecture Notes in Pure and Applied Mathematics **172**. Marcel Dekker, New York (1995), 223–242. MR 96h : 46078.

56. with Kjeld B. Laursen and Vivien G. Miller: Local spectral properties of commutators. *Proc. Edinburgh Math. Soc.* **38** (1995), 313–329. MR 96f : 47066.

57. with Robert Kantrowitz: Automatic continuity of homomorphisms and derivations on algebras of continuous vector-valued functions. *Czech. Math. J.* **45** (1995), 747–756. MR 96h : 46072.

58. with Jörg Eschmeier and Kjeld B. Laursen: Multipliers with natural local spectra on commutative Banach algebras. *J. Functional Analysis* **138** (1996), 273–294. MR 97g : 46066.

59. with M. Victoria Velasco: Continuity of epimorphisms and derivations on vector-valued group algebras. *Arch. Math. (Basel)* **68***(*1997), 151–158. MR 97h : 46079.

60. Banach algebras and local spectral theory. *Rend. Circ. Mat. Palermo (2) Suppl.* **52** (1998), 649–661. MR 2000a : 46082.

61. with M. Victoria Velasco: Network analysis. In: *Minimax Theory and Applications.* B. Ricceri and S. Simons (editors). Kluwer Academic Publishers, Dordrecht (1998), 167–189. MR 99e : 90032.

62. Growth conditions and Bishop's property (β). *Taiwanese J. Math.* **2** (1998), 287–295. MR 99g : 47009.

63. Natural spectrum, natural local spectra, and spectral mapping theorems for multipliers on Banach algebras. In: *Banach Algebras '97.* E. Albrecht and M. Mathieu (editors). Walter de Gruyter, Berlin (1998), 377–395. MR 2000g : 46068.

64. On local spectral properties of operators on Banach spaces. *Rend. Circ. Mat. Palermo (2) Suppl.* **56** (1998), 15–25. MR 2000j : 47010.

65. with Angel Rodríguez-Palacios and M. Victoria Velasco: Continuity of homomorphisms and derivations on algebras of vector-valued functions. *Quart. J. Math. Oxford (2)* **50** (1999), 1–22. MR 2000f : 46067.

66. Analytic functional models for operators on Banach spaces. *Contemp. Math.* **232** (1999), 253–268. MR 2000d : 47022.

67. Invited featured review: Analytic functional models and local spectral theory, by E. Albrecht and J. Eschmeier. In: *Featured Reviews in Mathematical Reviews 1997-1999; with Selected Reviews of Classical Books and Papers from 1940-1969.* D. G. Babbitt and J. E. Kister (editors). American Mathematical Society (2000), C 94–97.

68. with Robert Kantrowitz: Disjointness preserving and local operators on algebras of differentiable functions. *Glasgow Math. J.* **43** (2001), 295–309. MR 2002d : 47048.

69. Recent developments in local spectral theory. *Rend. Circ. Mat. Palermo (2) Suppl.* **68** (2002), 111–131. MR 2004d : 47014.

70. with T. Len Miller: The single-valued extension property for sums and products of commuting operators. *Czech. Math. J.* **52** (2002), 635–642. MR 2003e : 47006.

71. with T. Len and Vivien G. Miller: On operators with closed analytic core. *Rend. Circ. Mat. Palermo (2)* **51** (2002), 495–502. MR 2003h : 47008.

72. with T. Len and Vivien G. Miller: Growth conditions and decomposable extensions. *Contemp. Math.* **321** (2003), 197–205. MR 2004c : 47010.

73. Intertwining restrictions and quotients of decomposable operators. In: *Operator Theory and Banach Algebras.* M. Chidami, R. Curto, M. Mbekhta, F.-H. Vasilescu, and J. Zemánek (editors). Theta Foundation, Bucharest (2003), 119–131. MR 2004g : 47047.

74. with T. Len and Vivien G. Miller: Localization in the spectral theory of operators on Banach spaces. *Contemp. Math.* **328** (2003), 247–262. MR 2004j : 47006.

75. with Pietro Aiena and T. Len Miller: On a localised single-valued extension property. *Math. Proc. Roy. Irish Acad.* **104A** (2004), 17–34. MR 2005k : 47011.

76. with T. Len and Vivien G. Miller: Local spectral properties of weighted shifts. *J. Operator Theory* **51** (2004), 71–88. MR 2005c : 47045.

77. with T. Len and Vivien G. Miller: Spectral subspaces of subscalar and related operators. *Proc. Amer. Math. Soc.* **132** (2004), 1483–1493. MR 2004m : 47008. MR 2004m : 47008.

78. with T. Len and Vivien G. Miller: Banach algebras, local spectral theory, and extensions of operators. *Contemp. Math.* **363** (2004), 279–297. MR 2005f : 47008.

79. with T. Len and Vivien G. Miller: Growth conditions, compact perturbations and operator subdecomposability, with applications to generalized Cesàro operators. *J. Math. Anal. Appl.* **301** (2005), 32–51. MR 2005i : 47052.

80. with T. Len and Vivien G. Miller: Analytic bounded point evaluations for rationally cyclic operators on Banach spaces. *Integral Equations Operator Theory* **51** (2005), 257–274. MR 2005k : 47012.

81. with Robert Kantrowitz: Optimization for products of concave functions. *Rend. Circ. Mat. Palermo (2)* **54** (2005), 291–302. MR 2006g : 90083.

82. with Ernst Albrecht and T. Len Miller: Spectral properties of generalized Cesàro operators on Hardy and weighted Bergman spaces. *Arch. Math. (Basel)* **85** (2005), 446–459. MR 2006k : 47067.

83. with T. Len and Vivien G. Miller: The Kato-type spectrum and local spectral theory. *Czech. Math. J.* **57** (2007), 831–842. MR 2008g : 47016.

84. Spectral properties of Cesàro-like operators. In: *Advanced Courses of Mathematical Analysis II; Proceedings of the 2nd International School in Granada, Spain.* M. V. Velasco and A. Rodríguez-Palacios (editors). World Scientific, Singapore (2007), 123–140. MR 2008f : 47055.

85. with T. Len and Vivien G. Miller: When do quasi-similar operators have the same essential spectrum? *Contemp. Math.* **435** (2007), 311–326. MR 2008h : 47013.

86. with Robert Kantrowitz: Is the optimal rectangle a square? *Pi Mu Epsilon Journal* **12** (2007), 405–412. Reviewed in *Media Highlights,* College Math. J. **39** (2008), 253.

87. with T. Len Miller: Spectral inclusions for operators on Banach spaces. *Rend. Circ. Mat. Palermo (2)* **56** (2007), 391–410. MR 2009b : 47007.

88. with Robert Kantrowitz: Yet another proof of Minkowski's inequality. *American Math. Monthly* **115** (2008), 445–447. MR 2009c : 52015.

89. with Vladimir Müller: Localizable spectrum and bounded local resolvent functions. *Arch. Math. (Basel)* **91** (2008), 155–165. MR 2010k : 47016.

90. with Robert Kantrowitz: Approximation by weighted composition operators on $C(X)$. *Math. Proc. Roy. Irish Acad.* **108A** (2008), 119–135. MR 2010i : 47048.

91. with Robert Kantrowitz: Optimal angles for launching projectiles: Lagrange vs. CAS. *Canadian Applied Mathematics Quarterly* **16** (2008), 279–299. MR 2010i : 49065.

92. with T. Len and Vivien G. Miller: Essential spectral inclusions for operators on Banach spaces. *Mediterr. J. Math.* ***6*** (2009), 151–170. MR 2010d : 47004.

93. with Robert Kantrowitz: Let's do launch: more musings on projectile motion. *Pi Mu Epsilon Journal* **13** (2011) 219–228. MR 3363414.

94. with Robert Kantrowitz and Thomas J. Ransford: Regularity, scrambling, and the steady state for stochastic matrices. In: Function Spaces in Modern Analysis. *Contemp. Math.* **547** (2011), 153–164. MR 2856489.

95. with Robert Kantrowitz: Optimization of projectile motion in three dimensions. *Canadian Applied Mathematics Quarterly* **19** (2011), 43–64. MR 2907367.

96. with Pietro Aiena: On the stability of the localized single-valued extension property under commuting perturbations. *Proc. American Math. Soc.* **141** (2013), 2039–2050. MR 3034429.

97. with Robert Kantrowitz: Some real analysis behind optimization of projectile motion. *Mediterr. J. Math.* **11** (2014), 1081–1097. MR 3268809.

98. with Robert Kantrowitz: A fixed point approach to the steady state for stochastic matrices. *Rocky Mountain Journal of Math.* **44** (2014), 1243–1250. MR 3274346.

99. with Robert Kantrowitz: Another face of the Archimedean property. *College Math. J.* **46** (2015), 139–141. MR 3361762.

100. with Robert Kantrowitz: Optimization of projectile motion under linear air resistance. *Rend. Circ. Mat. Palermo (2)* **64** (2015), 365–382. MR 3421723.

101. with Robert Kantrowitz: More of Dedekind: his series test in normed spaces. *Int. J. Math. Math. Sci.* (2016), Article ID 2508172, 3 p. MR 3510935.

102. with Robert Kantrowitz: Completeness of ordered fields and a trio of classical series tests. *Abstract and Applied Analysis* (2016), ID 6023273, 6 p. MR 3574251.

103. with Robert Kantrowitz: Optimization of projectile motion under air resistance quadratic in speed. *Mediterr. J. Math.* **14** (2017), no. 1, Art. 9, 19 p. MR 3589925.

104. with Robert Kantrowitz: A Halley revival: another look at two of his classical gunnery rules. *Math. Sci.* **42** (2017), 131–142. MR 3727547.

105. with Robert Kantrowitz: Normed algebras and the geometric series test. *Surv. Math. Appl.* **12** (2017), 203–217. MR 3744774.

106. with Robert Kantrowitz: Launching a projectile to cover maximal area. To appear in *The Mathematical Gazette* (2019), 7 p.

Lecture Notes

1. *Funktionalanalysis.* Osnabrücker Schriften zur Mathematik, **V** Heft 20, Osnabrück (1980), 250 p.

2. *Mathematik für Naturwissenschaftler I.* Osnabrücker Schriften zur Mathematik, **V** Heft 33, Osnabrück (1981), 200 p.

3. with Heinz König: *Mathematische Wirtschaftstheorie.* First version: Saarbrücken (1976), 126 p. Second version: Essen (1982), 161 p.

Major grant support

1. DFG Grant Ne 249, total amount $ 108,000, as *Heisenberg Fellowship* of the German Science Foundation (Deutsche Forschungsgemeinschaft) at the University of Saarbrücken (1979)

2. DAAD grants of the German Academic Exchange Service for research visits at the Free University of Amsterdam, the University of Copenhagen, the Czechoslovak Academy of Sciences, and the Romanian Academy of Sciences (1978, 1983, 1984, 1985)

3. NATO Grant RG 073.81, jointly with E. Albrecht, Saarbrücken, G. R. Allan, Cambridge, and H. G. Dales, Leeds as principal investigator for the project *"Radical Banach Algebras and Automatic Continuity"* (1981)

4. DFG Grants Ne 249/2-1 and Ne 249/2-2 of the German Science Foundation (1983, 1986)

5. British Council Grant KN/991/x to present lectures in England (1986)

6. Support from NSF Grant DMS-8603001 to attend summer workshops on *"Banach Algebras"* at the University of California at Berkeley (1986, 1988, 1990)

7. NSF Grants DMS-8806921 and DMS-9096108 as principal investigator in the NSF Program for Modern Analysis, total amount $ 35,847, entitled *"Mathematical Sciences: Decomposable Operators and Automatic Continuity"* (1988 – 1990)

8. Support from the Universities of Cambridge (England), Düsseldorf, Essen, Münster, Saarbrücken (Germany), and Copenhagen (Denmark) for various summer research visits and conferences (1990, 1991, 1993, 1994)

9. Support from the Canadian NSERC Grant 3NT0140318 to attend a conference at the University of Manitoba (1993)

10. SNF Grant 11-1015 from the Danish Science Research Councils, jointly with Kjeld B. Laursen from the University of Copenhagen as principal investigator, total amount $ 50,000, entitled *"Local Spectral Theory in Banach Spaces"* (1994 – 1996)

11. Travel Grant from the University of Saarbrücken to present the main lecture at the Heinz König Fest Colloquium (1995)

12. Support from the London Mathematical Society to attend a conference in Newcastle (1995)

13. Support from the University of Copenhagen for a sabbatical visit at the Mathematics Institute of the University of Copenhagen (1995)

14. NSF Grant DUE-9551248 in the NSF Program for Instrumentation and Laboratory Improvement, jointly with B. Scarborough as principal investigator, W. T. England, and J. M. Pearson, total amount $ 105,119, NSF portion $ 50,000, entitled *"Student Research Projects in Multivariate Calculus"* (1995 – 1997)

15. Support from the University of Copenhagen, the Italian National Research Council CNR, and the German Science Foundation DFG for research visits to Europe (1996, 1997)

16. Visiting research professorship at the University of Copenhagen for two month summer research (1998)

17. Short-term visiting research professorship at the University of Palermo (Sicily–Italy) sponsored by a grant from the Italian National Research Council CNR (1998)

18. Support from the Universities of Rabat (Morocco) and Granada (Spain) for a research visit (1999)

19. CNR Travel Grant in the amount of $ 4,000 from the Italian National Research Council to attend, as one of the main invited speakers, a conference at Acquafredda di Maratea, Italy, and to present colloquium talks at the University of Palermo, Italy (2000)

20. NSF CCLI-Grant 0088422, jointly with T. L. Miller as principal investigator, J. L. Harvill, and J. M. Pearson, total amount $ 275,884, NSF portion $ 93,011, entitled *"Adaptation and Implementation of Computer Technology into the Mathematical Science Curriculum at Mississippi State University"* (2001 – 2003)

21. Travel Grant from the Danish Science Research Councils to attend a conference on Banach algebras in Odense, Denmark (2001)

22. Travel Grants from the University of Granada for three visits to present a total of five colloquium talks and a plenary talk at the Second International Course of Mathematical Analysis in Andalucía, Granada, Spain (2002, 2003, 2004)

23. Travel Grant in the amount of $ 1,500 from the University of Alberta to chair the workshop "*Banach Algebras in Operator Theory"* at a conference in Edmonton, Canada (2003)

24. Grant from the Ministerio de Educación y Ciencia (Spain), jointly with M. V. Velasco Collado, Á. Rodríguez Palacios, A. Moreno Galindo, and J. Becerra Guerrero, total amount approx. $ 180,000, entitled *"Espacios de Banach, Algebras de Banach (asociativas o no)"* (2006 – 2008)

25. Support from the Universities of Saarbrücken and Duisburg-Essen (Germany) and the Czech Academy of Sciences at Prague (Czech Republic) for research visits (2007)

26. One-month visiting research professorship at the University of Palermo (Sicily–Italy) sponsored by a grant from the Italian National Research Council CNR (2007)

27. Travel Grant from the University of Saarbrücken to present the main lecture at the Ernst Albrecht Fest Colloquium (2009)

Teaching experience at MSU

- **Undergraduate courses:** Trigonometry, Calculus for Business and Life Sciences I - II, Calculus I - IV, Honors Calculus II - IV, Introduction to Linear Algebra, Differential Equations I, Advanced Calculus I - II, Mathematical Writing, and Senior Math Seminar

- **Graduate courses:** Matrices and Linear Algebra, Mathematical Analysis I - II, Real Analysis I - II, Functional Analysis I - II, Special Topics in Analysis, and Dissertation Research

- **Seminars:** Convex Analysis, Banach Algebras and Decomposable Operators, Rational Approximation, Tensor Products, Local Spectral Theory, Spectral Theory and Analytic Sheaves, Banach Algebras and Analytic Functions, Multipliers on Commutative Banach Algebras, Composition Operators on Hardy spaces, Hypercyclic and Supercyclic Operators, and Semi-regular Operators (all jointly with Bill England, Len Miller, Vivien Miller, and Robert Smith)

Previous teaching experience

- at the **University of Saarbrücken**, Germany, 1978–1979: courses on Projective Geometry, Several Complex Variables, Convex Analysis, and Functional Analysis; numerous seminars since 1973

- at the **University of Essen**, Germany, 1979–1986: courses on Introduction to Topology, Differential Equations I - II, Mathematical Economics, Linear Systems, Mathematical Methods of Operators Research I - III, Functional Analysis I - II, Convex Analysis I - II; seminars on Automatic Continuity, Functional Analysis, Complex Analysis, Optimization in Banach Spaces, Convex Functions and Optimization (all jointly with Wolfgang Ruess), Nonlinear Functional Analysis (jointly with Heinz-Dieter Niessen and Wolfgang Ruess), Choquet Theory, and Mathematical Economics

- at the **University of Osnabrück**, Germany, 1980–1982: courses on Calculus for Science and Engineering I, Introduction to Algebra II, Functional Analysis I - II; seminars on C^*-algebras (jointly with Horst Behncke and Peter Meyer-Nieberg)

- at the **California Institute of Technology**, Fall 1986: seminar on Automatic Continuity and Related Topics (jointly with Wim Luxemburg)

- at the **University of California at Los Angeles**, Spring 1987: courses on Calculus for Life Sciences, Linear Algebra, and Mathematical Modeling
- at **Southwest Missouri State University**, 1987–1989: courses on Business Calculus, Calculus I - II, Ordinary Differential Equations, Advanced Calculus I - II, Real Analysis, Real and Abstract Analysis, and numerous seminars.

Supervised theses and dissertations

- L. Sdun: *Automatische Stetigkeit für konvexe Operatoren.* Master Thesis, University of Essen, Germany (1984), 84 p.
- A. Dudde: *Existenz von Gleichgewichten in Ökonomien mit Privateigentum und verallgemeinerten Präferenzen.* Master Thesis, Essen (1984), 76 p.
- M. Schnee: *Kritische Schranken für dynamische Leontief-Modelle.* Master Thesis, Essen (1984), 50 p.
- D. Kleine: *Konvexe Analysis und Probleme der Produktion und Verteilung.* Master Thesis, Essen (1984), 81 p.
- M. Buhlmann: *Sublineare Operatoren in der Theorie der unendlichen Netzwerke und Anwendungen.* Master Thesis, Essen (1984), 149 p.
- G. Woznik: *Über die Existenz von Gleichgewichten in endlichen Ökonomien mit allgemeinen Präferenzstrukturen.*. Master Thesis, Essen (1986), 119 p.
- D. Paggel: *Beiträge zur Theorie und Numerik dynamischer Netzwerke.* Master Thesis, Essen (1987), 105 p.
- K. - E. Vielemeier: *Bemerkungen zur Theorie der unendlichen Netzwerke.* Master Thesis, Essen (1988), 66 p.
- R. Rösener: *Superkonvexe Analysis.* Master Thesis, Essen (1989), 116 p.
- V. G. Miller: *Restrictions and quotients of decomposable operators and spectral inclusions on Banach spaces.* Ph. D. Dissertation, Mississippi State University (1993), 90 p.
- T. J. Loper: *Fixed-point theory and applications to equilibria in mathematical economics.* Master's Project, MSU (1994), 93 p.
- L. A. Hughes: *An application of fixed-point theory to optimal consumer satisfaction in an infinite horizon model.* Master's Project, MSU (2000), 6 p. Presented by Ms. Hughes at the February 2000 Meeting of the Louisiana - Mississippi Section of the Mathematical Association of America at the University of Louisiana - Lafayette.
- J. D. Alsworth: *Nondiscrete mathematical induction and its applications.* Master's Project, MSU (2000), 20 p.
- S. A. Henson: *Nondiscrete induction and iterative processes.* Master's Project, MSU (2000), 30 p.
- H. Wattanataweekul: *Convex analysis and flows in infinite networks.* Ph. D. Dissertation, MSU (2006), 175 p.
- D. Schweitzer: *Regular, primitive, and scrambling stochastic matrices.* Master's Project, MSU (2013), 20 p.

Major Professor for Ph. D. students at MSU:

- E. Ko: *Analysis of classes of singular boundary value problems* (Ph. D. 2012)
- S. Sasi: *Alternate stable states in ecological systems* (Ph. D. 2012)
- L. S. Kalappattil: *Classes of singular nonlinear eigenvalue problems with semipositone structure* (Ph. D. 2013)

Committee Member for graduate students at MSU: A. M. Al-Mahmoud (Ph. D. 1999), J. D. Alsworth (M. S. 2000), S. Ballamoole (Ph. D. 2014), S. Bhoumik (Ph. D. 2013), J. O. Bonyo (Ph. D. 2015), C. E. Brown (M. A. 1994), J. Goddard II (Ph. D. 2011), S. A. Henson (M. S. not completed), L. A. Hughes (M. S. 2000), J. Lindsey (M. S. 2018), T. J. Loper (M. S. 1994), J. C. Magers (M. S. 2001), D. McCollum (M. S. 2003), A. R. Miciano (Ph. D. 1995), V. G. Miller (Ph. D. 1993), B. A. Priddy (Ph. D. not completed), H. N. Roalson (M. S. 2017), D. Schweitzer (M. S. 2013), M. L. Stephan (M. S. 1994), A. Vishwanathan (Ph. D. 1994), J. L. Waldrop (M. S. 2001), W. Wang (M. S. 1992), H. Wattanataweekul (Ph. D. 2006), E. M. White (M. S. 1994), P. Wilz (M. S. 1995), J. S. Yang (Ph. D. 1995)

Faculty Mentor for a number of graduate students in the Department of Mathematics and Statistics at MSU. Several of these students were honored by departmental graduate teaching assistant awards. In May 2000, my student L. A. Hughes received the Master's Level Graduate Teaching Assistant of the Year 2000 Award, the first university-wide award for graduate student teaching at MSU.

Committee service at Mississippi State University

- Advisory Committee (1989–2000, 2002–2008, 2012–2016)
- Calculus Committee (since 1993, chair 1994–1995)
- Colloquium Committee (1989–1993)
- Computing and Classroom Technology Committee (1993–1997)
- Course Redesign Committee (2007–2008)
- Critical Needs and Directions Committee (2007–2009)
- Customized Books Committee (2009–2010)
- Departmental Promotion and Tenure Document Revision Committee (1997)
- Departmental Self-Study Committee (1991–1992, chair 2000–2001, chair 2016–2018)
- Evaluation of Classroom Teaching Committee (1990–1993, 2001–2004, 2008–2017, chair 2002–2003)
- Evaluation of Graduate Teaching Assistants Committee (1994–2002, 2016–2017)
- Faculty Mentor for Tenure-Track Faculty (2001–2003, 2007–2010, 2013–2017, 2018–2019)
- First-Two-Years Committee (2001–2002)
- Graduate Coordinating Committee (1989–1993, 1999–2001)
- Graduate Coordinator (1999–2000)
- Graduate Examination Committee for Algebra (1997–1998, 2018)
- Graduate Examination Committee for Analysis (1989–2000, 2004–2006)
- Graduate Examination Committee for Complex Analysis (2010)
- Graduate Examination Committee for Linear Algebra (2004–2010, 2012–2018)
- Graduate Examination Committee for Real Analysis (2006–2011, 2013–2017)
- Graduate Examination Committee for Functional Analysis (2008–2010, 2013, 2018)
- Graduate Program Poster Committee (1994)
- Head Search Committee (1993–1994, 1997–1998)
- Library Committee (1990–1992)
- Precalculus and Trigonometry Committee (chair 2002–2003)
- Promotion and Tenure Committee (1999–2001, 2002–2003, 2008–2011)
- Scholarship Committee (1994–1995, chair 2003–2006)
- Screening Committee (1990–1993, 1997–2001, chair 2000–2001, 2007–2009, 2011–2012)
- Statistics Search Committee (chair 2007–2008)
- Student Evaluation of Faculty Form Committee (chair 1997)
- Student Computer Requirements Committee (2002)
- Undergraduate Curriculum Committee (1994–1995, 1997–2001, chair 1997–1999)
- College of Arts and Sciences Dean Search Committee (2016–2017)
- College of Arts and Sciences Eminent Scholar Committee (2007–2008)
- College of Arts and Sciences Faculty Senate (2013–2015)
- College of Arts and Sciences Promotion and Tenure Committee (1992–1993, chair 1994–1995)
- MSU Provost Search Committee (2003)
- MSU Ethics Committee (2013)

Service as referee, reviewer, and organizer

- **Referee for mathematical journals:** Acta Applicandae Mathematicae, Acta Sci. Math. (Szeged), Aequationes Mathematicae, Annales Universitatis Saraviensis, Archiv der Mathematik (Basel), Banach J. of Math. Analysis, Bull. Belgian Math. Soc., Bull. Iranian Math. Soc., Bull. Korean Math. Soc., Bull. London Math. Soc., Canadian Math. Bull., Canadian J. of Math., Contemp. Math., Czech. Math. J., Discrete and Continuous Dynamical Systems, Glasgow Math. J., Indagationes Mathematicae, Integral Equations and Operator Theory, International J. of Math. and Math. Sciences, J. Australian Math. Soc., J. Convex Analysis, J. Functional Analysis, J. Korean Math. Soc., J. London Math. Soc., J. Math. Analysis and Applications, J. Operator Theory, Linear and Multilinear Algebra, Manuscripta Mathematica, Mathematica Scandinavica, Mathematical Proceedings of the Royal Irish Academy, Mathematische Annalen, Mathematische Zeitschrift, Michigan Math. J., Monatshefte für Mathematik, New Zealand J. Math., Operators and Matrices, Pacific J. Math., Proc. Amer. Math. Soc., Proc. Indian Acad. Sci., Proc. Royal Soc. Edinburgh, Quaestiones Mathematicae, Publicacions Mathemàtiques, Rendiconti del Circolo Matematico di Palermo, Rocky Mountain J. of Mathematics, Scientiae Mathematicae Japonicae, SIAM J. Control and Optimization, and Studia Mathematica
- **Referee for grant proposals** to the National Science Foundation, the Engineering Research Council of Canada, and the Czech Science Foundation, and also for books and papers submitted to Oxford University Press, de Gruyter Verlag, McGraw Hill, Kluwer Academic Publishers, and Chapman & Hall
- **Reviewer** for Mathematical Reviews and Zentralblatt für Mathematik
- **External referee** for doctoral dissertations and for tenure and promotion decisions at numerous universities in Australia, Canada, France, Germany, and the United States
- **Organizer** of a special session on *"Banach Algebras"*, jointly with John Duncan, at the 103 rd Annual National Meeting of the American Mathematical Society in San Diego, California (January 1997)
- **Member** of the International Scientific Committee for the organization of the International Congress entitled *"Théorie des Opérateurs et algèbres de Banach"* at the University of Rabat, Morocco (April 1999)
- **Chair** and organizer of the workshop "*Banach Algebras in Operator Theory"* at the conference *"Banach Algebras and their Applications"* at the University of Alberta, Edmonton (August 2003)
- **Organizer** of a one-month summer enhancement program at MSU for high school students of the *Algebra Project* guided by Robert P. Moses (July 2005)
- **Member** of the International Scientific Committee for the conference *"Small Workshop on Operator Theory"* at the University of Agriculture in Krakow, Poland (June 2006)
- **Member** of the Program Committee of the Mathematical Association of America for the National Joint Meetings in New Orleans (January 2007)
- **Organizer** of the conference "*Banach Algebras and Local Spectral Theory"* in honor of Kjeld Bagger Laursen, jointly with H. Garth Dales and Niels Grønbæk, at the University of Copenhagen (August 2008)
- **Member** of the Editorial Board of the *Banach Journal of Mathematical Analysis* (2010–2016)

Summary of conference and colloquium talks

In the past forty-two years, more than 170 invited colloquium talks, seminar talks, and talks at professional meetings in fourteen countries were given, including:

- Invited one-hour plenary addresses to the Yorkshire Functional Analysis Group in Leeds (1986), the North British Functional Analysis Seminar in Newcastle-upon-Tyne (1986), the Southern California Functional Analysis Seminar in Los Angeles (1987), the Danish Mathematical Society in Copenhagen (1993), the König Fest in Saarbrüchen (1995), the Wabash Extramural Modern Analysis Seminar (1998), the International Conferences on Function Spaces in Edwardsville (1990, 1994, 1998, 2002, 2006, 2010), and the Albrecht Fest in Saarbrüchen (2009)

- Invited one-hour colloquium or seminar talks at the Universities of Darmstadt, Düsseldorf, Essen, Freiburg, Hamburg, Kaiserslautern, München, Münster, Oldenburg, Paderborn, Saarbrücken, Trier, and Tübingen (all Germany); King's College, London, and University of Cambridge (England); Universities of Copenhagen (Denmark), Granada (Spain), Palermo (Italy), Amsterdam and Leiden (Netherlands), Warsaw and Polish Academy of Sciences at Warsaw (Poland), Czechoslovak Academy of Sciences at Prague (Czechoslovakia); Universities of California at Berkeley, Los Angeles, and Santa Barbara, Claremont Colleges, Hamilton College, The Citadel, California State University Long Beach, Loyola University at New Orleans, Universities of Arkansas, Mississippi, Missouri - Columbia, Missouri - Rolla, Mississippi State University, and Indiana University - Purdue University at Indianapolis

- Invited one-hour plenary talks at the following international research centers: Mathematical Research Institute Oberwolfach, Germany (1973, 1976, 1977, 1978, 1979, 1980, 1985, 1987, 1990), Research Center Han sur Lesse, Belgium (1977, 1978), Centre International de Rencontres Mathématiques at Luminy, France (1995), and International Center for Scientific Culture at Erice, Italy (1996)

- Invited one-hour plenary talks at the international conferences on *"Banach Algebras"* in Long Beach (1981), Copenhagen, Denmark (1984), Berkeley (1986, 1988, 1990), Cambridge, England (1991), Winnipeg, Canada (1993), Newcastle-upon-Tyne, England (1995), Blaubeuren, Germany (1997), Odense, Denmark (2001), Edmonton, Canada (2003), and Bordeaux, France (2005)

- Invited one-hour plenary talks at international conferences *"Functional Analysis"* in Paderborn, Germany (1978), *"Operator Theory"* in Timişoara, Herculane, and Bucharest, Romania (1983, 1984, 1985), *"Infinite Dimensional Linear Programming"* in Cambridge, England (1984), *"Banach Algebras"* in Gory Swietokrzyskie, Poland (1985), *"Optimization and Convex Analysis"* and *"Orlicz Memorial Conference"* at the University of Mississippi (1989, 1991), *"Spectral Theory, Algebras of Operators, and Analytic Functions"* at the University of Saarbrücken, Germany (1990), *"Operator Theory and Evolution Equations"* at Louisiana State University (1994), *"Operator Theory"* in Cefalù, Italy (1997), *"Théorie des Opérateurs et Algèbres de Banach"* in Rabat, Morocco (1999), *"Functional Analysis and Approximation Theory IV"* in Acquafredda di Maratea, Italy (2000), *"Mathematical Analysis in Andalucía II"* in Granada, Spain (2004), *"Functional Analysis, Operator Theory, and Applications"* in Palermo–Mondello, Italy (2005), *"Small Workshop on Operator Theory"* in Krakow, Poland (2006), and *"Banach Algebras and Local Spectral Theory"* in Copenhagen, Denmark (2008)

- Invited or contributed twenty-minute talks at the *"Great Plains Operator Theory Symposium"* in Iowa City (1992), at the *"Southeastern Analysis Meeting"* in Memphis (1993), Tuscaloosa (1998), Charlottesville (2000), Knoxville (2003), Tuscaloosa (2004), and Lexington (2005), at the Conference *"Functional Analysis and Approximation Theory III"* in Acquafredda di Maratea, Italy (1996), at the Conference *"Trends in Banach Spaces and Operator Theory"* in Memphis (2001), and at the *"Phil Curtis Mathematics and Teaching Conference"* in Los Angeles (2008)

- Invited talks at Summer and Winter Schools organized jointly by the Czechoslovak Academy of Sciences and Charles University at Prague in Stefanová (1977), Spindleruv Mlyn (1978, 1980), Loket (1981), Spisska Nova Vez (1982), Zelezna Ruda (1983), Cesky Krumlov (1983), Srni (1984, 1985), Marianske Lazne (1985), Jilemnice (1986), and Kasejovice (1990)

- Invited or contributed talks at meetings of the American Mathematical Society and the Mathematical Association of America in Atlanta (1988, 2005), Biloxi (1991, 1995), Cincinnati (1994), Gainesville (1999), Gulfport (2005), Louisville (1990), Orono (1991), San Antonio (1993), San Diego (1997), San Francisco (1991, 1995, 2000), and Tuscaloosa (1992)

Detailed list of presentations

1. *Ein allgemeiner Satz über gleichmäßige Beschränktheit.* Conference "Functional Analysis" at the Mathematical Research Institute Oberwolfach, Germany (Oct. 1973)

2. *Varianten zum Konvergenzsatz von Simons und Anwendungen in der Choquettheorie.* Conference "Functional Analysis" at Oberwolfach, Germany (Oct. 1976)

3. *On Choquet's theory.* 5 th Winter School on "Abstract Analysis" of the Mathematical Institute of the Czechoslovak Academy of Sciences, held at Stefanová, Czechoslovakia (Jan. 1977)

4. *On the Strassen disintegration theorem.* Summer School on "Operator Theory and Banach Algebras" at the Research Center Han sur Lesse, Belgium (June 1977)

5. *Automatische Stetigkeit translationsinvarianter linearer Operatoren.* Conference "Functional Analysis" at Oberwolfach, Germany (Oct. 1977)

6. *Zum Desintegrationssatz von Strassen.* Math. Coll. University of Paderborn, Germany (Nov. 1977)

7. *Automatic continuity of translation-invariant linear operators.* 6 th Winter School on "Abstract Analysis" of the Math. Inst. Czech. Acad. Sci. at Spindleruv Mlyn, Czechoslovakia (Jan. 1978)

8. *Ränder für Familien oberhalbstetiger Funktionen.* Math. Coll. University of Saarbrücken, Germany (May 1978)

9. *Automatic continuity of linear operators.* Summer School on "Operator Theory and Banach Algebras" at the Research Center Han sur Lesse, Belgium (June 1978)

10. *Automatic continuity in linear systems.* Conference "Funktionenräume und Funktionenalgebren" at Oberwolfach, Germany (July 1978)

11. *Automatic continuity of linear operators.* Math. Coll. Free University of Amsterdam, Netherlands (Oct. 1978)

12. *Automatic continuity in linear systems.* Math. Coll. University of Leiden, Netherlands (Oct. 1978)

13. *Automatische Stetigkeit linearer Operatoren.* Math. Coll. University of Kaiserslautern, Germany (Oct. 1978)

14. *Automatische Stetigkeit in linearen Systemen.* Math. Coll. University of Essen, Germany (Nov. 1978)

15. *Automatic continuity of linear operators.* Second Conference on "Functional Analysis" at the University of Paderborn, Germany (Jan. 1979)

16. *Ein Grenzwertsatz in der Theorie der superkonvexen Analysis.* Habilitation Colloquium, University of Saarbrücken, Germany (June 1979)

17. *Reversibilität und Irreversibilität von dissipativen linearen Systemen.* Habilitation Lecture, University of Saarbrücken, Germany (June 1979)

18. *Automatic continuity of non-analytic functional calculi.* Conference "Functional Analysis, Operator Functions, and Spectral Theory" at Oberwolfach, Germany (Oct. 1979)

19. *Automatic continuity of operational calculi on algebras of differentiable functions.* 8 th Winter School on "Abstract Analysis" of the Math. Inst. Czech. Acad. Sci. at Spindleruv Mlyn, Czechoslovakia (Jan. 1980)

20. *Über die Stetigkeit von verallgemeinerten lokalen Operatoren.* Math. Coll. University of Tübingen, Germany (May 1980)

21. *Local operators in the theory of ultradistributions.* Conference "Functional Analysis" at Oberwolfach, Germany (Oct. 1980)

22. *Stetigkeitsaussagen für verallgemeinerte lokale Operatoren.* Habilitation Colloquium, University of Essen, Germany (Nov. 1980)

23. *Automatische Stetigkeit in linearen Systemen.* Math. Coll. Hochschule der Bundeswehr - Hamburg, Germany (Dec. 1980)

24. *Automatic continuity of linear systems.* 12 th Functional Analysis Seminar of Prof. Pták, Math. Inst. Czech. Acad. Sci., at Loket, Czechoslovakia (May 1981)

25. *Local operators.* 12 th Functional Analysis Seminar of Prof. Pták, Math. Inst. Czech. Acad. Sci., at Loket, Czechoslovakia (May 1981)

26. *Stetigkeitsaussagen für verallgemeinerte lokale Operatoren.* Math. Coll. Technische Hochschule Darmstadt, Germany (May 1981)

27. *Continuity properties of non-analytic functional calculi.* Conference on "Radical Banach Algebras and Automatic Continuity" at California State University Long Beach, California (July 1981)

28. *Desintegration und ein Problem der Produktion und Verteilung.* Math. Coll. University of Oldenburg, Germany (May 1982)

29. *Disintegration and a supply-demand problem.* 13 th Functional Analysis Seminar of Prof. Pták, Math. Inst. Czech. Acad. Sci., at Spisska Nova Vez, Czechoslovakia (May 1982)

30. *Desintegration und ein Problem der Produktion und Verteilung.* Math. Coll. University of Kaisers lautern, Germany (Nov. 1982)

31. *Flows in infinite networks.* 11 th Winter School on "Abstract Analysis" of the Math. Inst. Czech. Acad. Sci. at Zelezna Ruda, Czechoslovakia (Jan. 1983)

32. *Convex operators into webbed spaces.* 14 th Functional Analysis Seminar of Prof. Pták, Math. Inst. Czech. Acad. Sci., at Cesky Krumlov, Czechoslovakia (May 1983)

33. *On flows in generalized networks.* 8 th Conference on "Operator Theory" at Timişoara - Herculane, Romania (June 1983)

34. *Automatic continuity in linear systems.* Math. Coll. University of Copenhagen, Denmark (Sept. 1983)

35. *Super-decomposable operators and automatic continuity.* Math. Coll. at the Polish Academy of Sciences at Warsaw, Poland (Nov. 1983)

36. *Automatic continuity: a survey.* Math. Coll. University of Warsaw, Poland (Nov. 1983)

37. *An application of fixed-point theory to equilibrium analysis.* 12 th Winter School on Abstract Analysis of the Math. Inst. Czech. Acad. Sci. at Srni, Czechoslovakia (Jan. 1984)

38. *Decomposable operators and automatic continuity.* Math. Coll. at the Czechoslovak Academy of Sciences at Prague, Czechoslovakia (May 1984)

39. *Flüsse in unendlichen Netzwerken.* Math. Coll. University of Trier, Germany (June 1984)

40. *Uniform boundedness and automatic continuity.* Jointly with Vlastimil Pták. 9 th Conference on "Operator Theory" at Timişoara - Herculane, Romania (June 1984)

41. *Decomposable operators, divisible subspaces, and problems of automatic continuity.* 9 th Conference on "Operator Theory" at Timişoara - Herculane, Romania (June 1984)

42. *Flüsse in unendlichen Netzwerken.* Math. Coll. University of Saarbrücken, Germany (July 1984)

43. *The theorems of Gale and Ford-Fulkerson for infinite networks.* Symp. "Infinite Dimensional Linear Programming", University of Cambridge, England (Sept. 1984)

44. *Super-decomposable operators, divisible subspaces, and automatic continuity I & II.* 15 th Functional Analysis Seminar of Prof. Pták, Math. Inst. Czech. Acad. Sci., at Marianske Lazne, Czechoslovakia (Sept. 1984)

45. *Some classes of local operators and automatic continuity.* 13 th Winter School on Abstract Analysis of the Math. Inst. Czech. Acad. Sci. at Srni, Czechoslovakia (Jan. 1984)

46. *Flows in infinite networks and applications.* Conference "Functional Analysis" at Oberwolfach, Germany (Feb. 1985)

47. *Decomposable operators, divisible subspaces, and problems of automatic continuity.* Workshop on "Derivations in Banach Algebras", University of Copenhagen, Denmark (July 1985)

48. *On the spectral maximal spaces of certain decomposable operators.* 10 th Conference on "Operator Theory" at Bucharest, Romania (Aug. 1985)

49. *On the decomposability of certain multiplication operators.* Conference on "Banach Algebras", organized by the University of Warsaw at Gory Swietokrzyskie, Poland (Sept. 1985)

50. *On the spectral maximal spaces of certain decomposable operators.* Address to the Yorkshire Functional Analysis Group at Leeds, England (Feb. 25, 1986)

51. *Decomposable operators, divisible subspaces, and problems of automatic continuity.* Address to the North British Functional Analysis Seminar, University of Newcastle-upon-Tyne, England (March 3, 1986)

52. *Decomposable operators and automatic continuity.* Math. Coll. University of Cambridge, England (March 5, 1986)

53. *Flows in infinite networks.* Math. Coll. King's College, London, England (March 6, 1986)

54. *Flüsse in unendlichen Netzwerken.* Math. Coll. University of Freiburg, Germany (April 1986)

55. *On a theorem of P. Vrbová.* 17 th Functional Analysis Seminar of Prof. Pták, Math. Inst. Czech. Acad. Sci., at Jilemnice, Czechoslovakia (May 1986)

56. *Flüsse in unendlichen Netzwerken.* Math. Coll. University of München, Germany (July 1986)

57. *On the structure of spectral maximal spaces.* Workshop on "Derivations and Radical Banach Algebras", University of California at Berkeley, California (July 1986)

58. *Decomposable operators and automatic continuity.* Short communication at the International Congress of Mathematicians at Berkeley, California (Aug. 1986)

59. *Flows in infinite networks.* Functional Analysis Seminar, University of California at Berkeley, California (Nov. 1986)

60. *Flüsse in unendlichen Netzwerken.* Math. Coll. University of Oldenburg, Germany (Feb. 1987)

61. *Flows in infinite networks.* Math. Coll. Indiana University - Purdue University at Indianapolis, Indiana (Feb. 1987)

62. *Flows in continuous networks.* Address to the Southern California Functional Analysis Seminar, Los Angeles, California (Feb. 28, 1987)

63. *Uniform boundedness, automatic continuity, and linear systems.* Math. Coll. Claremont Colleges at Claremont, California (March 3, 1987)

64. *Flows in infinite networks.* Math. Coll. Southwest Missouri State University at Springfield, Missouri (March 1987)

65. *Decomposable operators, divisible subspaces, and automatic continuity.* Functional Analysis Seminar, University of California at Los Angeles, California (March 1987)

66. *Automatic continuity for linear systems.* Math. Coll. University of California at Santa Barbara, California (May 1987)

67. *Decomposable operators and intertwining linear transformations.* Conference "Functional Analysis and Operator Theory" at Oberwolfach, Germany (Oct. 1987)

68. *Non-analytic functional calculi and spectral maximal spaces.* 94 th Annual Meeting of the Amer. Math. Soc. at Atlanta, Georgia (Jan. 1988)

69. *Decomposable operators and automatic continuity.* Math. Coll. University of Missouri at Columbia, Missouri (Feb. 1988)

70. *Local spectral theory and automatic continuity.* Math. Coll. University of Arkansas at Fayetteville, Arkansas (Feb. 1988)

71. *Automatic continuity for linear systems.* Math. Coll. University of Missouri at Rolla, Missouri (March 1988)

72. *Nonanalytic functional calculus and spectral maximal spaces.* Workshop on "Radical Banach algebras and Automatic continuity" at the University of California at Berkeley, California (July 1988)

73. *Automatic continuity of linear operators.* Math. Coll. California State University Long Beach, California (Feb. 1989)

74. *Automatic continuity in linear systems.* Math. Coll. Loyola University, New Orleans, Louisiana (Feb. 1989)

75. *Some unexpected applications of the sandwich theorem.* Conference on "Optimization and Convex Analysis" at the University of Mississippi, Oxford, Mississippi (March 1989)

76. *On the decomposability of multiplication operators and multipliers.* 96 th Annual Meeting of the Amer. Math. Soc. at Louisville, Kentucky (Jan. 1990)

77. *Commutative Banach algebras and decomposable convolution operators.* Conference on "Function Spaces", Southern Illinois University at Edwardsville, Illinois (April 19, 1990)

78. *Applications of convex analysis to flows in networks.* Conference "Abstract Convex Analysis" at Oberwolfach, Germany (May 16, 1990)

79. *Super-decomposable operators and representations of locally compact abelian groups.* 21 st Functional Analysis Seminar of Prof. Pták, Math. Inst. Czech. Acad. Sci., at Kasejovice, Czechoslovakia (May 1990)

80. *From sandwich to minimax theorems.* 21 st Functional Analysis Seminar of Prof. Pták, Math. Inst. Czech. Acad. Sci., at Kasejovice, Czechoslovakia (May 1990)

81. *Kommutative Banachalgebren und zerlegbare Operatoren.* 2 nd SAAR Colloquium on "Spectral Theory, Algebras of Operators, Analytic Functions, and Related Topics" at the University of Saarbrücken, Germany (May 25, 1990)

82. *Anwendungen der Hull-Kernel Topologie in der Spektraltheorie.* Math. Coll. University of Saarbrücken, Germany (May 28, 1990)

83. *Kommutative Banachalgebren, zerlegbare Operatoren und Darstellungen von lokal-kompakten abelschen Gruppen.* Math. Coll. Univer. Münster, Germany (May 31, 1990)

84. *Decomposable operators, commutative Banach algebras and representations of locally compact abelian groups.* Math. Coll. University of Copenhagen, Denmark (June 1990)

85. *Kommutative Banachalgebren und Gruppendarstellungen.* Math. Coll. University of Essen, Germany (June 25, 1990)

86. *Decomposable operators and representations of locally compact abelian groups.* Workshop on "Banach Algebras", University of California at Berkeley, California (July 24, 1990)

87. *Local spectral properties of multipliers on Banach algebras and applications to convolution operators.* 97 th Annual Meeting of the Amer. Math. Soc. at San Francisco, California (Jan. 1991)

88. *A note on dynamic Leontief systems.* 68 th Annual Meeting of the Louisiana - Mississippi Section of the Mathematical Association of America at Biloxi, Mississippi (March 1991)

89. *Generalized convexity and the Mazur-Orlicz theorem.* Orlicz Memorial Conference, University of Mississippi, Oxford, Mississippi (March 22, 1991)

90. *Lokale Spektraleigenschaften von Multiplikatoren of Banachalgebren.* Math. Coll. University of Essen, Germany (June 1991)

91. *Kommutative Banachalgebren und zerlegbare Faltungsoperatoren.* Math. Coll. University of Düsseldorf, Germany (June 1991)

92. *Local spectral theory for multipliers on commutative Banach algebras.* Banach Algebras Symposium at the University of Cambridge, England (July 1991)

93. *Banach algebras, decomposable multipliers, and applications to harmonic analysis.* Special Session on "Function Algebras and Function Spaces" at the 94 th Summer Meeting of the Amer. Math. Soc. at Orono, Maine (Aug. 1991)

94. *Multipliers with natural local spectra and applications to convolution operators.* Special Session on "Harmonic Analysis and Related Topics" at the 872 nd Meeting of the Amer. Math. Soc. at Tuscaloosa, Alabama (March 1992)

95. *Local spectral theory for convolution operators on locally compact abelian groups.* Great Plains Operator Theory Symposium at Iowa City, Iowa (May 1992)

96. *Decomposable measures on locally compact abelian groups.* 99 th Annual Meeting of the Amer. Math. Soc. at San Antonio, Texas (Jan. 13, 1993)

97. *Local spectral theory, commutators, and spectral inclusions on Banach spaces.* 9 th Southeastern Analysis Meeting at Memphis, Tennessee (March 7, 1993)

98. *Recent developments in the local spectral theory of operators on Banach spaces.* One-hour address to the Danish Math. Society, Copenhagen, Denmark (May 24, 1993)

99. *Local spectral theory, perturbed spectral inclusions, and spectral properties of multipliers on commutative Banach algebras.* Conference on "Banach Algebras and Amenability" at the University of Manitoba, Winnipeg, Canada (Aug. 4, 1993)

100. *Perturbed spectral inclusions for operators on Banach spaces.* 100 th Annual Meeting of the Amer. Math. Soc. at Cincinnati, Ohio (Jan. 14, 1994)

101. *Local spectral theory for operators on Banach spaces and applications to convolution operators on group algebras.* Conf. "Operator Theory and Evolution Equations" at Louisiana State University, Baton Rouge, Louisiana (March 1994)

102. *On certain Banach algebras of vector-valued functions.* Second Conference on "Function Spaces", Southern Illinois University at Edwardsville, Illinois (May 1994)

103. *Local spectral theory for Banach algebras of vector-valued functions.* 101 st Annual Meeting of the Amer. Math. Soc. at San Francisco, California (Jan. 6, 1995)

104. *Der Satz von Hahn-Banach: Varianten und Tendenzen.* Main one-hour address at the Heinz König Fest Colloquium at the University of Saarbrücken, Germany (Jan. 13, 1995)

105. *Innovative ideas for teaching mathematics.* Invited panelist in a one-hour panel discussion at the 72 nd Annual Meeting of the Louisiana - Mississippi Section of the Mathematical Association of America at Biloxi, Mississippi (March 3, 1995)

106. *Banach algebras of vector-valued functions.* Conference on "Banach Algebras" at the University of Newcastle-upon-Tyne, England (July 27, 1995)

107. *A functional-analytic approach to flows in networks.* Math. Coll. University of Copenhagen, Denmark (Sept. 5, 1995)

108. *Local spectral theory for multipliers on Banach algebras.* Conference "Deuxième Journées de Théorie des Opérateurs" at the Centre International de Rencontres Mathématiques at Luminy, France (Oct. 30, 1995)

109. *Flüsse und Potentiale in unendlichen Netzwerken.* Math. Coll. University of Essen, Germany (Nov. 15, 1995)

110. *Ein funktionalanalytischer Zugang zur Theorie der unendlichen Netzwerke.* Math. Coll. University of Münster, Germany (Nov. 16, 1995)

111. *Banach algebras and local spectral theory.* Third International Conference on "Functional Analysis and Approximation Theory" at Acquafredda di Maratea, Italy (Sept. 1996)

112. *Network analysis.* Conference on "Minimax Theory and Applications" at the International Center for Scientific Culture in Erice, Sicily, Italy (Oct. 1996)

113. *Automatic continuity for Banach algebras of vector-valued functions.* Jointly with M. Victoria Velasco. Special Session on "Banach Algebras", organized by John Duncan and Michael M. Neumann, at the 103 rd Annual Meeting of the Amer. Math. Soc. at San Diego, California (Jan. 9, 1997)

114. *Student Research Projects in Multivariate Calculus.* Poster Session of the Instrumentation and Laboratory Improvement Program of the National Science Foundation. 103 rd Annual Meeting of the Amer. Math. Soc. at San Diego, California (Jan. 10, 1997)

115. *On Dunford's property* (C) *and Bishop's property* (β). Workshop on "Operator Theory" in Cefalù, organized by the University of Palermo, Sicily, Italy (July 15, 1997)

116. *Natural spectrum, natural local spectra, and spectral mapping theorems for multipliers on commutative Banach algebras.* Conference on "Banach Algebras" at the Heinrich-Fabri-Institute of the University of Tübingen at Blaubeuren, Germany (July 1997)

117. *Spectral properties of convolution operators on group algebras.* 14 th Southeastern Analysis Meeting at Tuscaloosa, Alabama (Feb. 1998)

118. *Functional models for operators on Banach spaces.* Third Conference on "Function Spaces", Southern Illinois University at Edwardsville, Illinois (May 1998)

119. *Spectral properties of commutators.* Applied Math. Coll. University of Palermo, Sicily, Italy (Oct. 8, 1998)

120. *Spectral inclusions.* Applied Math. Coll. University of Palermo, Sicily, Italy (Oct. 14, 1998)

121. *Vector lattices and networks.* Positivity Seminar, Indiana University - Purdue University - Indianapolis, Indiana (Dec. 3, 1998)

122. *Local spectral theory and spectral inclusions.* Wabash Extramural Modern Analysis Seminar, organized by Indiana University, Purdue University, University of Illinois, and IUPUI, Wabash College, Indiana (Dec. 5, 1998)

123. *Local spectral theory and spectral inclusions.* Special Session on "Linear Operator Theory" at the 940 th Meeting of the Amer. Math. Soc. at Gainesville, Florida (March 13, 1999)

124. *Intertwining restrictions and quotients of decomposable operators.* International Congress on "Théo rie des opérateurs et algèbres de Banach", Université de Rabat, Morocco (April 1999)

125. *The local spectrum revisited.* Math. Coll. Universidad de Granada, Spain (April 1999)

126. *Disjointness preserving operators on algebras of differentiable functions.* 16 th Southeastern Analysis Meeting at Charlottesville, Virginia (March 18, 2000)

127. *Recent developments in local spectral theory.* Fourth International Conference on "Functional Analysis and Approximation Theory" at Acquafredda di Maratea, Italy (Sept. 22, 2000)

128. *On the algebraic characterization of weighted composition and differential operators.* Math. Coll. University of Palermo, Sicily, Italy (Sept. 29, 2000)

129. *On the single-valued extension property.* Applied Math. Coll. University of Palermo, Sicily, Italy (Oct. 2, 2000)

130. *Disjointness preserving and local operators on algebras of differentiable functions.* Special Session on "Banach Algebras" at the 958 th Meeting of the Amer. Math. Soc. at San Francisco, California (Oct. 22, 2000)

131. *Disjointness preserving operators on algebras of differentiable functions.* Conference "Banach Algebra Theory in Context", Odense, Denmark (Aug. 16, 2001)

132. *The single-valued extension property revisited.* Conference on "Trends in Banach Spaces and Operator Theory" at the University of Memphis, Tennessee (Oct. 6, 2001)

133. *On the current state of and future research trends in function spaces.* Invited panelist in a ninety-minute panel discussion at the Fourth Conference on "Function Spaces", Southern Illinois University at Edwardsville, Illinois (May 15, 2002)

134. *Localization in the spectral theory of operators on Banach spaces.* Fourth Conference on "Function Spaces", Southern Illinois University at Edwardsville, Illinois (May 16, 2002)

135. *Teaching mathematics with Mathematica.* Math. Coll. Universidad de Granada, Spain (May 23, 2002)

136. *Decomposable operators, Bishop's property* (β)*, and growth conditions for operators on Banach spaces.* Math. Coll. Universidad de Granada, Spain (May 24, 2002)

137. *The local spectrum and the single-valued extension property for operators on Banach spaces.* Math. Coll. Universidad de Granada, Spain (May 28, 2002)

138. *Analytic bounded point evaluations and local spectral theory.* 19 th Southeastern Analysis Meeting at Knoxville, Tennessee (March 21, 2003)

139. *Using Mathematica to demystify your favorite calculus book – a case study on Descartes, Mississippi bugs, and more.* Invited one-hour talk in the NSF-REU Program in Mathematics (Research Experience for Undergraduates) at Mississippi State University (June 18, 2003)

140. *Banach algebras and subscalar operators.* Conference on "Banach Algebras and their Applications" at the University of Alberta, Edmonton, Canada (Aug. 5, 2003)

141. *Disjointness preserving operators on algebras of differentiable functions.* Math. Coll. Universidad de Granada, Spain (Sept. 9, 2003)

142. *Banach algebras and growth conditions for operators on Banach spaces.* Math. Coll. Universidad de Granada, Spain (Sept. 16, 2003)

143. *Weighted composition and partial differential operators from an algebraic point of view.* Parallel Thinking – Mathematics Mini-Conference, University of Mississippi, Oxford, Mississippi (Nov. 14, 2003)

144. *Amazing bugs – using Mathematica in calculus.* Mississippi School for Mathematics and Science, Columbus, Mississippi (Nov. 19, 2003)

145. *Banach algebras and decomposable extensions of operators.* 20 th Southeastern Analysis Meeting at Tuscaloosa, Alabama (March 26, 2004)

146. *An algebraic characterization of linear partial differential operators.* Invited one-hour talk in the NSF-REU Program in Applied Mathematics (Research Experience for Undergraduates) at Mississippi State University (July 8, 2004)

147. *Motion in the plane – exploring Mathematica in calculus.* Talk for undergraduate students. Hamilton College, Clinton, New York (July 22, 2004)

148. *Spectral properties of Cesàro-like operators.* Second International Course of Mathematical Analysis in Andalucía at the University of Granada, Spain (Sept. 21, 2004)

149. *Generalized Cesàro operators on Hardy and Bergman spaces.* 111 th Annual Meeting of the Amer. Math. Soc. at Atlanta, Georgia (Jan. 6, 2005)

150. *Products of concave functions.* Jointly with Robert Kantrowitz. 111 th Annual Meeting of the Amer. Math. Soc. at Atlanta, Georgia (Jan. 7, 2005)

151. *Is the optimal rectangle a square?* 82 nd Annual Meeting of the Louisiana-Mississippi Section of the Math. Assoc. of America, Gulfport, Mississippi (March 5, 2005)

152. *Spectral properties of generalized Cesàro operators on Hardy and Bergman spaces.* 21 st Southeastern Analysis Meeting at Washington & Lee University, Lexington, Virginia (April 8, 2005)

153. *Generalized Cesàro operators on Hardy and Bergman spaces.* Conference on "Banach Algebras and their Applications" at the University of Bordeaux, France (July 7, 2005)

154. *Kato-type operators and Bishop's property* (β). Conference on "Functional Analysis, Operator Theory, and Applications" at Palermo–Mondello, Italy (Sept. 19, 2005)

155. *When do quasi-similar operators have the same essential spectrum?* Fifth Conference on "Function Spaces", Southern Illinois University at Edwardsville, Illinois (May 16, 2006)

156. *Subdecomposability and the Kato-type spectrum.* Conference "Second Small Workshop on Operator Theory" at the University of Agriculture in Krakow, Poland (June 24, 2006)

157. *Approximation durch Disjunktheit erhaltende Operatoren auf* $C(X)$. Math. Coll. Universität des Saarlandes, Saarbrücken, Germany (Feb. 27, 2007)

158. *Approximation durch gewichtete Kompositionsoperatoren.* Math. Coll. Universität Duisburg–Essen, Essen, Germany (March 16, 2007)

159. *Disjointness preserving and* ε*-disjointness preserving operators.* Math. Coll. Czech Academy of Sciences, Prague, Czech Republic (March 27, 2007)

160. *On bounded local resolvent functions.* Math. Coll. University of Palermo, Sicily, Italy (May 4, 2007)

161. *Approximation by weighted composition operators on* $C(X)$. Math. Coll. University of Palermo, Sicily, Italy (May 11, 2007)

162. *Algebraic spectral subspaces and bounded local resolvent functions.* Mathematics and Teaching Conference 2008, Philip C. Curtis Jr. Center, University of California Los Angeles (March 14, 2008)

163. *Approximation by operators that preserve disjointness.* Jointly with Robert Kantrowitz. Conference "Banach Algebras and Local Spectral Theory" in honor of Kjeld Bagger Laursen at the University of Copenhagen, Denmark (Aug. 29, 2008)

164. *Bounded local resolvent functions.* Conference "Banach Algebras and Local Spectral Theory" in honor of Kjeld Bagger Laursen at the University of Copenhagen, Denmark (Aug. 30, 2008)

165. *Hitting golf balls and tee balls as far as possible.* Jointly with Robert Kantrowitz. MAA Session on Mathematics and Sports, Joint Mathematics Meetings, Washington, DC (Jan. 6, 2009)

166. *Lokale Spektraltheorie – Gestern und Heute.* Main one-hour address at the Ernst Albrecht Fest Colloquium, Universität des Saarlandes, Saarbrücken, Germany (July 31, 2009)

167. *Contractive mappings and the steady state for stochastic matrices.* Sixth Conference on "Function Spaces", Southern Illinois University at Edwardsville, Illinois (May 20, 2010)

168. *The fundamental theorem for finite Markov chains revisited.* Invited one-hour talk in the NSF-REU Program in Applied Mathematics and Biostatistics at Mississippi State University (July 8, 2010)

169. *Let's do launch – Mathematica vs. Lagrange.* Invited one-hour talk in the NSF-REU Program in Applied Mathematics and Biostatistics at Mississippi State University (July 7, 2011)

170. *A close look at the geometric series test.* Jointly with Robert Kantrowitz. MAA Session on Topics and Techniques for Teaching Real Analysis, Joint Mathematics Meetings, Baltimore, MD (Jan. 15, 2014)

171. *Let's do launch with Mathematica: the good, the bad, and the ugly in the optimization of projectile motion.* Invited 50 minute talk in the Math Club at Mississippi State University (Jan. 27, 2015)

172. *Further variations on the theme of completeness.* Jointly with Robert Kantrowitz. MAA Session on Topics and Techniques for Teaching Real Analysis, Joint Mathematics Meetings, Seattle, WA (Jan. 6, 2016)

173. *A Halley revival on projectile motion.* Math. Coll. The Citadel, SC, (Sept. 18, 2018)

174. *Halley's gunnery rules revisited.* Math. Coll. Hamilton College, NY, (Oct. 19, 2018)