# Curriculum Vitae & Publication List

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# Contents

# Chapter 1

# Curriculum Vitae

## 1.1 University Education

- June 27, 1995: Graduation as Ph.D. in Natural Sciences (Grade 'Summa Cum Laude'); Advisor of the Ph.D. Thesis: W. Kratz.
- May 1993 – June 1995: Candidate for a doctorate at Universität Ulm.
- March 9, 1993: Graduation as 'Diplom–Wirtschaftsmathematiker' (Grade 'Mit Auszeichnung'); Advisor of the Master's Thesis: W. Kratz.
- August 21, 1992: Graduation as Master of Science in Applied Mathematics (GPA 4.0); Advisor of the Master's Thesis: S. Hui.
- August 1991 – August 1992: Studies of Applied Mathematics at San Diego State University in San Diego.
- April 27, 1989: Graduation as bachelor in 'Wirtschaftsmathematik' (Grade 'sehr gut').
- October 1, 1986: Begin of the studies of 'Wirtschaftsmathematik' (mathematics, economics, operations research, statistics, computer science) as well as accompanying studies in philosophy at Universität Ulm.

## 1.2 Appointments

- Since January 2014: Curators' Professor at Missouri University of Science and Technology.
- 1/17–8/17: Visiting Professor at Universidade de Brasília.
- 3/11–6/11: Visiting Professor at Middle East Technical University.
- 9/10–3/11: Visiting Professor at Universität Ulm.
- Since September 2008: Professor at Missouri University of Science and Technology.
- Since 2004: Adjunct Professor at San Diego State University.
- 9/04–8/08: Associate Professor at University of Missouri–Rolla.
- 8/01–5/03: Associate Professor at Florida Institute of Technology.
- 8/98–8/04: Assistant Professor at University of Missouri–Rolla.
- 9/97–8/98: Visiting Assistant Professor at San Diego State University.
- 3/97–8/97: Visiting Research Assistant Professor at National University of Singapore.
- 10/95–3/97: Assistant Professor at Universität Hohenheim.
- 8/94–4/95: Lecturer at Berufsakademie Heidenheim.
- 10/92–7/93: Teaching Assistant at Universität Ulm.

- 8/91–7/92: Teaching Assistant at San Diego State University.
- 10/89–7/91: Scientific Assistant at Universität Ulm.
- Visiting Positions: Masaryk University Brno, Brno, Czech Republic (Fall 1994, Spring 1996, Summer 2000); University of New South Wales, Sydney, Australia (Summer 2004); Universität Ulm, Ulm, Germany (Summer 2000, Summer 2001, Summer 2003, Summer 2007); University of São Paulo, Ribeirão Preto, Brazil (February 2015).

## 1.3 Grants

- Australian Research Council, Discovery Grant, 2020–2023, $365,000, Partially Observable MDPs, Monte Carlo Methods, and Sustainable Fisheries, with Dirk Kroese, Jerzy Filar, Nan Ye, Hanna Kurniawati at University of Queensland, Brisbane, Australia.

- University of Missouri South Africa Education Program (UMSAEP) grant, 2020–2021, $4,600, to visit Professor Kailash Patidar at the University of the Western Cape, Cape Town, South Africa.

- National Science Foundation, Division of Mathematical Sciences, Analysis Program, NSF Grant Number 1535822, $10,097, March 1, 2015 (for CoPDE 2015, together with Sergei Suslov and Svetlana Roudenko).

- The State of São Paulo Research Foundation, FAPESP Grant Number 14/20187-0, January 30 – February 23, 2015 (together with Jaqueline Mesquita).

- National Science Foundation, Division of Mathematical Sciences, Analysis Program, NSF Grant Number 1440664, $3,864, May 1, 2014 (for CoPDE 2014, together with Sergei Suslov, Svetlana Roudenko, and Carlos Castillo-Chavez).

- National Science Foundation Grant (Interdisciplinary Grants in the Mathematical Sciences), "Time Scales in Economics and Finance", NSF Grant Number 0624127, $100,000, September 1, 2007 – August 30, 2008.

- University of Missouri Research Board Grant, "Applications of Dynamic Equations on Time Scales", $15,000, May 2005 – December 2006.

- NSF / ISDE Travel Grant for Graduate Students, $1,400, July 2005.
- TÜBITAK Grant "First International Workshop on Dynamic Equations on Time Scales", $20,000, July 2005.
- University of Missouri Research Board Grant, "Linear Differential Equations on Measure Chains", $11,833, March 1999 – August 1999.
- Second part of the Feodor–Lynen Research Fellowship at San Diego State University; Host: D. Lutz, September 1997 – August 1998.
- First part of the Feodor–Lynen Research Fellowship at National University of Singapore; Host: R. Agarwal, March 1997 – September 1997.
- Award of a Feodor–Lynen Research Fellowship of the Alexander von Humboldt–Foundation in Bonn, Germany, July 24, 1996.
- Fellowship from the 'Landesgraduiertenförderung' of the State of Baden–Württemberg, Germany, October 1993 – June 1995.

## 1.4 Awards

1. Obada Prize, 2021 (NSP, African Academy of Sciences).
2. Curators' Distinguished Professor, 2013 (Missouri S&T).
3. Faculty Research Award, 2011 (Missouri S&T).
4. Outstanding Teaching Award, 2010 (Missouri S&T).
5. Faculty Excellence Award, 2009 (Missouri S&T).
6. Faculty Excellence Award, 2007 (UMR).
7. Freshman Engineering Program "We Love Your Class" Award, 2007 (UMR).
8. Faculty Excellence Award, 2006 (UMR).
9. Outstanding Teaching Award, 2006 (UMR).
10. CAS Excellence in Teaching Award, 2006 (UMR).
11. Freshman Engineering Program "We Love Your Class" Award, 2006 (UMR).
12. Certificate of Recognition, 2006 (LEAD Program, UMR).
13. Faculty Excellence Award, 2005 (UMR).
14. CAS Excellence in Teaching Award, 2005 (UMR).
15. Outstanding Teaching Award, 2005 (UMR).
16. Faculty Excellence Award, 2004 (UMR).
17. CAS Excellence in Teaching Award, 2004 (UMR).

## 1.5 Other Honors

1. The paper "Oscillation of second-order nonlinear dynamic equations on time scales" (coauthored with Samir Saker) has been designated an "Emerging Research Front" by Thomson ISI Essential Science Indicators. ISI Essential Science Indicators lists most prominent papers in 22 broad fields of science. This paper was the only paper selected in the field of mathematics in February 2011.

2. The paper "Dynamic equations on time scales: a survey" (coauthored with Ravi Agarwal, Donal O'Regan, and Allan Peterson) has been designated an "Emerging Research Front" by Thomson ISI Essential Science Indicators. ISI Essential Science Indicators lists most prominent papers in 22 broad fields of science. This paper was the only paper selected in the field of mathematics in October 2007.

3. Honorary Knight of St. Pat's, Rolla, Missouri, March 17, 2006.

4. The paper "Dynamic equations on time scales: a survey" (coauthored with Ravi Agarwal, Donal O'Regan, and Allan Peterson) was the "most downloaded article", Journal of Computational and Applied Mathematics, January–August 2004.

5. Prize for the best presentation during the "Eighth International Conference of Difference Equations and Applications", Brno, Czech Republic, August 1, 2003.

6. Work has been featured as a cover story ("Taming Nature's Numbers") in "New Scientist Magazine" (British Edition, vol. 179, No. 2404), July 19, 2003.

7. Work has been featured on Sciencedaily.com, January 29, 2003.

8. The paper "Asymptotic behavior of dynamic equations on time scales" (coauthored with Donald Lutz) has been designated a "Fast Breaking Paper" by Thomson ISI Essential Science Indicators. ISI Essential Science Indicators lists highly cited papers in 22 broad fields of science. This paper was the only paper selected in the field of mathematics in October 2002.

# Chapter 2

# Service

## 2.1 Service to Professional Societies

1. Member (elected) of the Board of Directors of ISDE, 2019–2021.
2. President (elected) of ISDE, 2017–2019.
3. Member (elected) of the Board of Directors of ISDE, 2017–2019.
4. Member of the International Advisory Board, Merit University, Sohag, Egypt (since 2016).
5. Vice President (elected) of ISDE, 2015–2017.
6. Member (elected) of the Board of Directors of ISDE, 2015–2017.
7. President (elected) of ISDE, 2013–2015.
8. Member (elected) of the Board of Directors of ISDE, 2013–2015.
9. Member (elected) of the Board of Directors of ISDE, 2011–2013.
10. Member (elected) of the Board of Directors of ISDE, 2009–2011.
11. Member (elected) of the Board of Directors of ISDE, 2007–2009.
12. Vice President (elected) of ISDE, 2005–2007.
13. Member (elected) of the Board of Directors of ISDE, 2005–2007.
14. Member (elected) of the Board of Directors of ISDE, 2003–2005.
15. Member (elected) of Alexander-von-Humboldt Society, since 1996.
16. Member of ISDE (International Society of Difference Equations), since 2001.

17. Member (invited) of MAA (Mathematical Association of America), 1998–2002.

18. Member (invited) of DMV (German Mathematical Society), since 1994.

19. Member (invited) of AMS (American Mathematical Society), since 1991.

20. Webmaster for the webpage of ISDE, 2003–2007.

21. Organizer of special sessions during AMS (American Mathematical Society) meetings (San Diego, January 2002; Atlanta, March 2002; Phoenix, January 2004; Atlanta, January 2005; Mainz, June 2005; San Antonio, January 2006; New Orleans, January 2007; San Francisco, January 2010).

22. Organizer of special sessions during DMV (German Mathematical Society) meetings (Mainz, June 2005).

23. Organizer of special sessions during SIAM (Society for Industrial and Applied Mathematics) meetings (Myrtle Beach, March 2001; Atlanta, January 2005).

24. Organizer of special sessions during IFNA (International Federation of Nonlinear Analysts) meetings (Catania, July 2000; Atlanta, May 2003).

25. Organizer of special sessions during AIMS (American Institute of Mathematical Sciences) meetings (Dresden, May 2010; Madrid, July 2014).

## 2.2 Service to Profession

### Conferences Organized

1. International Adisory Board, Member, "ICMMAAC-2020", JECRC University, Jaipur, India, August 7–9, 2020.

2. Scientific Committee, Member, "ICAME'20", Balikesir, Turkey, June 24–26, 2020 (delayed to June 30–July 2, 2021)

3. Scientific Committee, Member, "CDDEA2020", High Tatras, Slovakia, June 22–26, 2020 (delayed to 2021)

4. Scientific Committee, Member, "Dynamic Equations on Time Scales", Będlewo, Poland, May 20–24, 2020 (delayed to August 26–30, 2020).

5. Scientific Committee, Member and Special Session Organizer, "International Conference on Differential and Difference Equations and Applications", Lisbon, Portugal, July 1–5, 2019.

6. Scientific Committee, Member, "Dynamic Equations on Time Scales", Będlewo, Poland, June 12–16, 2019.

7. Scientific Committee, Member, "8th International Conference on Mathematics and Information Sciences", Egypt, February 8–10, 2019.

8. Scientific and Advisory Committee, Member, "The Seventh Abu Dhabi University Annual International Conference: Mathematical, Physical Sciences and Engineering Applications", Abu Dhabi University, Abu Dhabi, United Arab Emirates, November 30 – December 2, 2018.

9. International Organization Committee, Member, ICAAM 2018, "Fourth International Conference on Analysis and Applied Mathematics", Lefkosa, Cyprus, September 6–9, 2018.

10. Scientific Committee, Member, "Bosnian Conference on Mathematical Sciences", Sarajevo, Bosnia and Herzegovina, July 12–14, 2018.

11. Scientific Committee, Member, "Dynamical Systems, Difference and Functional Equations", Krynica-Zdroj, Poland, June 4–8, 2018.

12. Scientific Committee, Member, "Dynamic Equations on Time Scales", Będlewo, Poland, May 30 – June 3, 2018.

13. Scientific Committee, Member, ICDEA2018, "Twentyfourth International Conference on Difference Equations and Applications", Dresden, Germany, May 21–25, 2018.

14. Scientific Committee, Member, "XI Congresso GAFEVOL", Brasilia, Brasil, October 23–26, 2017.

15. Scientific Committee, Member, "International Conference on Mathematical Modelling in Applied Sciences", Saint Petersburg, Russia, July 24–28, 2017.

16. Scientific Committee, Member, ICMME2017, "Interenational Conference on Mathematics and Mathematics Education", Sanliurfa, Turkey, May 11–13, 2017.

17. Scientific Committee, Member, "International Workshop on Mathematical Methods in Engineering", Ankara, Turkey, April 27–29, 2017.

18. Scientific Committee, Member, "International Conference on Biotechnology and Bioengineering", Bangkok, Thailand, December 8–10, 2016.

19. International Advisory Board, Member, "Third International Conference on Analysis and Applied Mathematics (ICAAM 2016)", Almaty, Kazakhstan, September 7–10, 2016.

20. Technical Program Committee, Member, "The 2nd Conference on Ordinary Differential Equations and Dynamical Systems", Suzhou, China, July 25–27, 2016.

21. Scientific Committee, Honorary Chair, ICRAPAM 2016, "International Conference on Recent Advances in Pure and Applied Mathematics", Bodrum, Turkey, May 19–23, 2016.

22. Scientific Committee, Member, PODE2016, "Progress on Difference Equations", Riga, Latvia, May 17–20, 2016.

23. Scientific Committee, Member, ICMME2016, "Interenational Conference on Mathematics and Mathematics Education", Elazig, Turkey, May 12–14, 2016.

24. Scientific Committee, Member, "4th International Conference on Mathematical, Computational and Statistical Sciences", Barcelona, Spain, February 13–15, 2016.

25. Scientific Committee, Member, "International Meeting on Applied Mathematics", Errachidia, Morocco, May 9–12, 2016.

26. Scientific Committee, Member, "International Conference on Pure and Applied Mathematics", Van, Turkey, July 23–26, 2015.

27. Technical Program Committee, Member, "Conference on Ordinary Differential Equations and Dynamical Systems", Shanghai, China, July 19–21, 2015.

28. Scientific Committee, Chair, PODE 2015, "Progress on Difference Equations", Covilha, Portugal, June 15–18, 2015.

29. Organizing Committee, Member, "Conference on Partial Differential Equations", Munich, Germany, March 25–29, 2015.

30. Advisory Board, Member, "Second International Conference on Analysis and Applied Mathematics", Shymkent, Kazakhstan, September 11–13, 2014.

31. Scientific Director, "Symposium on Differential Equations and Difference Equations 2014", Homburg, Germany, September 5–8, 2014.

32. Scientific Committee, Member, "Conference on Differential and Difference Equations and Applications 2014", Jasna, Slovakia, June 23–27, 2014.

33. International Organizing Committee, Member, "Conference on Partial Differential Equations", Novacella, Italy, May 28–June 1, 2014.

34. Scientific Committee, Member, "Analysis, Topology, and Applications 2014", Vrnjacka Banja, Serbia, May 26–29, 2014.

35. Scientific Committee, Member, "Progress on Difference Equations 2014", Izmir, Turkey, May 21–24, 2014.

36. Scientific and Advisory Committee, Member, "The Second Abu Dhabi University Annual International Conference: Mathematical Science and Applications", Abu Dhabi University, Abu Dhabi, United Arab Emirates, November 29 – December 1, 2013.

37. Scientific Committee, Member, "Progress on Difference Equations 2013", Białystok, Poland, July 21–26, 2013.

38. Scientific Committee, Member, "The Cape Verde International Days on Mathematics 2013", Praia, Cape Verde, April 22–25, 2013.

39. Scientific and Advisory Committee, Member, "International Conference: Mathematical Science and Applications", Abu Dhabi University, Abu Dhabi, United Arab Emirates, December 26–31, 2012.

40. Scientific Committee, Member, "Mathematical Inequalities and Nonlinear Functional Analysis with Applications", Cheju Island, Korea, July 25–29, 2012.

41. Scientific Committee, Member, "International Conference on Pure and Applied Mathematics", Guelma, Algeria, May 28–30, 2012.

42. Scientific Committee, Member, "Dynamical System Modeling and Stability Investigation", Kyiv, Ukraina, May 25–27, 2011.

43. Scientific Committee, Member, "REMIA 2010", Plovdiv, Bulgaria, December 10–12, 2010.

44. Scientific Committee, Member, "The Sixth International Conference on Dynamical Systems and Applications", Antalya, Turkey, July 10–14, 2010.

45. Scientific Committee, Chair, "Festcolloquium in Honor of Professor Dr. Donald A. Lutz on the Occasion of his 70th Birthday", San Diego, California, March 29, 2010.

46. Scientific Committee, Member, "Mathematical Inequalities and Applications 2010", Lahore, Pakistan, March 7–13, 2010.

47. Scientific Committee, Chair, "The Fourteenth International Conference on Difference Equations and Applications", Istanbul, Turkey, July 21–25, 2008.

48. Organizing Committee, Co-Chair, "14th International Conference on Difference Equations and Applications", Istanbul, Turkey, July 21–25, 2008.

49. Scientific Committee, Member, "Conference in Honor of Allan Peterson", Abbazia di Novacella, Italy, July 28 – August 2, 2007.

50. Scientific Committee, Chair, "The First International Workshop on Dynamic Equations on Time Scales", Istanbul, Turkey, June 27 – July, 2005.

51. Organizing Committee, Co-Chair, "The First International Workshop on Dynamic Equations on Time Scales", Istanbul, Turkey, June 27 – July 1, 2005.

## Editor-in-Chief for the following Journals

1. Advances in Difference Equations (since January 2015).

2. Advances in Dynamical Systems and Applications (since October 2005).

3. International Journal of Difference Equations (since October 2005).

4. Journal of Mathematics and Computer Science (since 2016).

5. Abstract and Applied Analysis (2006–2011).

6. Difference Equations and Discrete Dynamical Systems — An Electronic Newsletter (2005–2008).

7. International Journal of Applied Mathematics and Statistics (2008–2018).

8. Journal of Mathematics and Statistics (January–December 2015).

9. Foundations (since March 2021).

## Associate Editor for the following Journals

1. Acta Universitatis Apulensis. Mathematics. Informatics (since September 2018).
2. Advances in Analysis (since December 2015).
3. Advances in Theoretical and Applied Mathematics (since November 2005).
4. Advances in Difference Equations (since July 2003).
5. Analysis (since May 2013).
6. An International Journal of Optimization and Control: Theories & Applications. IJOCTA (since October 2019).
7. Applied Mathematical and Computational Sciences (since December 2009).
8. Applied Mathematics and Information Sciences (since July 2011).
9. Arab Journal of Basic and Applied Sciences (since January 2021).
10. Archive of Inequalities and Applications (since July 2003).
11. Axioms (since December 2018).
12. Biometrics and Biostatistics International Journal (since December 2014).
13. Biostatistics and Biometrics (since December 2017).
14. Cankaya University Journal of Science and Engineering (since January 2010).
15. Communications in Combinatorics, Cryptography and Computer Science (since January 2021).

16. Communications in Mathematical Analysis (since August 2005).

17. Contemporary Analysis and Applied Mathematics (since December 2011).

18. Contributions to Mathematics (since May 2020).

19. Differential Equations and Dynamical Systems (since March 2011).

20. e-Journal of Analysis and Applied Mathematics (since March 2018).

21. Fariman Journal of Pure and Applied Mathematics (since March 2010).

22. Global and Stochastic Analysis (since April 2016).

23. Global Journal of Pure and Applied Mathematics (since May 2005).

24. Heliyon (since March 2015).

25. Hikari Ltd (Advisory Board Member, since March 2013).

26. Indian Journal of Mathematics and Mathematical Sciences (since September 2014).

27. International Electronic Journal of Pure and Applied Mathematics (since June 2010).

28. International Journal of Analysis and Applications (since July 2017).

29. International Journal of Applied Mathematics and Informatics (since November 2013).

30. Journal of Mathematical Control Science and Applications (since October 2018).

31. International Journal of Applied Mathematics and Statistics (since Jan 2008).

32. International Journal of Current Research in Computer Science and Technology (since December 2014).

33. International Journal of Dynamical Systems and Differential Equations (since May 2006).

34. International Journal of Mathematical Models and Methods in Applied Sciences (since October 2013).

35. International Journal of Mathematics and Statistics (since June 2007).

36. International Journal of Modern Mathematics (since January 2006).

37. International Journal of Modern Sciences and Engineering Technology (since April 2014).

38. International Journal of Nonlinear Analysis and Applications (since December 2009).

39. International Journal of Nonlinear Operators Theory and Applications (since October 2005).

40. International Journal of Publishing (since September 2014).

41. International Journal of Pure Mathematics (since November 2013).

42. International Journal of Scientific and Innovative Mathematical Research (since April 2013).

43. International Journal of Statistika and Mathematika (since July 2012).

44. Involve - A Journal of Mathematics (since January 2008).

45. Journal of Abstract Differential Equations and Applications (since March 2010).

46. Journal of Advances in Mathematical Analysis and Applications (since December 2016).

47. Journal of Applied & Computational Mathematics (since November 2012).

48. Journal of Business & Management (since June 2013).

49. Journal of Computational Analysis and Applications (since September 2011).

50. Journal of Computer Science and Computational Mathematics (since July 2016).

51. Journal of Inequalities and Applications (since July 2003).

52. Journal of Inequalities and Special Functions (since March 2016).

53. Journal of Mathematical and Computational Science (since November 2011).

54. Journal of Mathematics and Statistics (since August 2012).

55. Journal of Nonlinear Evolution Equations and Applications (since May 2011).

56. Journal of Nonlinear Functional Analysis (since December 2013).

57. Journal of Reviews on Global Economics (since November 2012).

58. Journal of Scientific Research and Reports (since February 2013).

59. Journal of the Egyptian Mathematical Society (since January 2014).

60. Journal of Ultra Scientist of Physical Sciences (since July 2016).

61. JSM Mathematics and Statistics (since Feburary 2014).

62. Karaelmas Science and Engineering Journal (since Feb 2011).

63. Konuralp Journal of Mathematics (since August 2012).

64. Malaya Journal of Matematik (since August 2012).

65. Mathematical Inequalities and Applications (since December 2008).

66. Mathematical Research Publishers / E-Book Series (since March 2010).

67. Mathematica Aeterna (since January 2011).

68. Mathematical Modelling and Control (since January 2021).

69. Mathematica Moravica (since June 2010).

70. Mathematics (since May 2018).

71. Nonautonomous Dynamical Systems (since October 2013).

72. Nonlinear Dynamics and Systems Theory (Regional Editor, North America, since November 2006).

73. Open Journal of Mathematical Analysis (Advisory Board, since June 2018).

74. Palestine Journal of Mathematics (since August 2017).

75. Pure Mathematical Sciences (since February 2012).

76. Research in Applied Mathematics (since March 2016).

77. Results in Nonlinear Analysis (since January 2018).

78. Sci (Advisory Board Member, since October 2018).

79. Selçuk Journal of Applied Mathematics (since February 2004).

80. Sohag Journal of Mathematics (since September 2014).

81. SOP Transactions on Statistics and Analysis (since November 2013).

82. Tamap Journal of Mathematics and Statistics (since March 2017).

83. The African Diaspora Journal of Mathematics (since February 2012).

84. The Journal of Nonlinear Sciences and Applications (Honorary Chairman, since August 2010).

85. Theoretical Mathematics and Applications (since May 2011).

86. Transcations of Mathematical and Computational Sciences (since October 2020).

87. Turkish Journal of Mathematics (since March 2015).

88. Abstract and Applied Analysis (2006–2018).

89. International Journal of Mathematics and Mathematical Sciences (2006–2017).

## Guest Editor for the following Journals

1. Computers and Mathematics with Applications.

2. Dynamic Systems and Applications.

3. Journal of Applied Mathematics.

4. Journal of Computational and Applied Mathematics.

5. Journal of Difference Equations and Applications.

6. Mathematics.

7. Nonlinear Dynamics and Systems Theory.

## Reviewer for the following Journals

1. Acta Applicanda Mathematicae.

2. Acta Mathematica Applicatae Sinica (English Series).

3. Acta Mathematica Scientia.

4. Acta Mathematica Universitatis Comenianae.

5. Acta Mathematica Vietnamica.

6. Advances in Difference Equations.

7. Advances in High Energy Physics.

8. African Diaspora Journal of Mathematics.

9. American Mathematical Monthly.

10. Analele Stiintifice ale Universitatii Ovidius Constanta.

11. Analysis.

12. Analysis and Applications.

13. Annales Polonici Mathematici.

14. Annales. Universitatis Mariae Curie-Sklodowska. Section A. Mathematica.

15. Annali di Matematica.

16. Annali di Matematica Pura ed Applicata.

17. Annals of the Alexandru Ioan Cuza University – Mathematics.

18. ANZIAM Journal.

19. Applicable Analysis and Discrete Mathematics.

20. Applications and Applied Mathematics.

21. Applied Mathematical Modelling.

22. Applied Mathematics. A Journal of Chinese Universities. Series A.

23. Applied Mathematics E-Notes.

24. Applied Mathematics and Computation.

25. Applied Mathematics Letters.

26. Arabian Journal for Science and Engineering.

27. Arab Journal of Mathematical Sciences.

28. Archiv der Mathematik.

29. Archive of Inequalities and Applications.

30. Arkiv för Matematik.

31. Australian Journal of Mathematical Analysis and Applications.

32. Boundary Value Problems.

33. British Journal of Mathematics and Computer Science.

34. Bulletin of Mathematical Analysis and Applications.

35. Bulletin of the Institute of Mathematics, Academia Sinica New Series.

36. Bulletin of the Iranian Mathematical Society.

37. Bulletin of the Malaysian Mathematical Sciences Society.

38. Canadian Applied Mathematics Quarterly.

39. Canadian Journal of Mathematics.

40. Canadian Mathematical Bulletin.

41. Carpathian Journal of Mathematics.

42. Central European Journal of Mathematics.

43. Chaos, Solitons & Fractals.

44. Communications in Mathematical Analysis.

45. Communications in Nonlinear Science and Numerical Simulation.

46. Complex Analysis and Operator Theory.

47. Complexity.

48. Computational and Applied Mathematics.

49. Computers and Mathematics with Applications.

50. Constructive Approximation.

51. Control and Cybernetics.

52. Creative Mathematics and Informatics.

53. CUBO Matematica Educacional.

54. Czechoslovak Mathematical Journal.

55. Demonstratio Mathematica.

56. Differential Equations and Dynamical Systems.

57. Discrete and Continuous Dynamical Systems.

58. Discrete and Continuous Dynamical Systems, Series B.

59. Discrete Dynamics in Nature and Society.

60. Dynamic Systems and Applications.

61. Dynamical Systems.

62. Dynamics of Continuous, Discrete and Impulsive Systems.

63. Dynamics of Continuous, Discrete and Impulsive Systems, Series B.

64. Electronic Journal of Differential Equations.

65. Electronic Journal of Qualitative Theory of Differential Equations.

66. Electronic Transactions on Numerical Analysis.

67. ESAIM: Control, Optimisation and Calculus of Variations.

68. Far East Journal of Mathematical Sciences.

69. Filomat.

70. Forum Mathematicum.

71. Fractals.

72. Fractional Differential Calculus.

73. Funckcialaj Ekvacioj.

74. Functional Differential Equations.

75. Georgian Matematical Journal.

76. Glasgow Matematical Journal.

77. Glasnik Matematicki.

78. Herald Journal of Education and General Studies.

79. IEEE Transactions of Automatic Control.

80. IEEE Transactions on Neural Networks.

81. IEEE Transactions of Systems, Man and Cybernetics - Part B.

82. IMA Journal of Applied Mathematics.

83. Indian Journal of Pure and Applied Mathematics.

84. Information Sciences.

85. Integral Transforms and Special Functions.

86. Integers.

87. International Journal of Applied Mathematical Sciences.

88. International Journal of Bifurcation and Chaos.

89. International Journal of Computational Methods.

90. International Journal of Computer Mathematics.

91. International Journal of Control.

92. International Journal of Differential Equations.

93. International Journal of Evolution Equations.

94. International Journal of Mathematics.

95. International Journal of Mathematics and Mathematical Sciences.

96. International Journal of Numerical Methods for Heat and Fluid Flow.

97. International Journal of Physical Sciences.

98. International Mathematics Research Notices.

99. Inverse Problems.

100. Iranian Journal of Science and Technology.

101. Journal of Advances Mathematical Studies.

102. Journal of Analysis.

103. Journal of Applied Analysis.

104. Journal of Applied Analysis and Computation.

105. Journal of Applied Mathematics.

106. Journal of Applied Mathematics and Computing.

107. Journal of Approximation Theory.

108. Journal of Computational and Applied Mathematics.

109. Journal of Computational Methods in Science and Engineering.

110. Journal of Computer Science.

111. Journal of Difference Equations and Applications.

112. Journal of Engineering.

113. Journal of Geometry.

114. Journal of Inequalities in Pure and Applied Mathematics.

115. Journal of Integral Equations and Applications.

116. Journal of Languages and Culture.

117. Journal of Mathematical Analysis and Applications.

118. Journal of Mathematical Sciences.

119. Journal of Mathematics.

120. Journal of Nonlinear Mathematical Physics.

121. Journal of Optimization Theory and Applications.

122. Journal of Physics A: Mathematical and Theoretical.

123. Journal of the Franklin Institute.

124. Journal of the Korean Mathematical Society.

125. Journal of the London Mathematical Society.

126. Journal of Mathematical Inequalities.

127. Journal of Mathematical Research and Applications.

128. Journal of Network and Systems Management.

129. Journal of Nonlinear Science.

130. Journal of Theoretical Probability.

131. Journal of Zhejian University – Science A.

132. Kragujevac Journal of Mathematics.

133. Linear Algebra and its Applications.

134. Mathematical and Computer Modelling.

135. Mathematical Biosciences and Engineering.

136. Mathematical Communications.

137. Mathematical Inequalities & Applications.

138. Mathematical Methods in the Applied Sciences.

139. Mathematical Modelling and Analysis.

140. Mathematical Problems in Engineering.

141. Mathematica Scandinavika.

142. Mathematica Slovaca.

143. Matematicki Vesnik.

144. Mathematics and Computers in Simulations.

145. Mathematics and Mechanics of Solids.

146. Mathematics of Control, Signals, and Systems.

147. Mathematische Annalen.

148. Mathematische Nachrichten.

149. Mediterranean Journal of Mathematics.

150. Miskolc Mathematical Notes.

151. Missouri Journal of Mathematical Sciences.

152. Multidiscipline Modeling in Materials and Structures.

153. Neural Computing and Applications.

154. Neural Networks.

155. Nonlinear Analysis.

156. Nonlinear Analysis: Hybrid Systems.

157. Nonlinear Analysis: Modelling and Control.

158. Nonlinear Analysis: Real World Applications.

159. Nonlinear Dynamics.

160. Nonlinear Oscillations.

161. Nonlinear Theory and its Applications, IEICE.

162. Periodica Mathematica Hungarica.

163. Proceedings of A. Razmadze Mathematical Institute.

164. Proceedings of the American Mathematical Society.

165. Proceedings of the Estonian Academy of Sciences.

166. Proceedings of the London Mathematical Society.

167. Proceedings of the Royal Society of Edinburgh.

168. Proceedings Mathematical Sciences.

169. Publicationes Mathematicae Debrecen.

170. Propulsion and Power Research.

171. Qualitative Theory of Dynamical Systems.

172. Rendiconti del Circolo Matematico di Palermo.

173. Reports on Mathematical Physics.

174. Resultate der Mathematik.

175. Revista Matematica Complutense.

176. Rocky Mountain Journal of Mathematics.

177. Science China Mathematics.

178. SIAM Journal on Control and Optimization.

179. Soochow Journal of Mathematics.

180. Studia Scientiarum Mathematicarum Hungarica.

181. Systems and Control Letters.

182. Taiwanese Journal of Mathematics.

183. Tamkang Journal of Mathematics.

184. Tamsui Oxford Journal of Information and Mathematical Sciences.

185. The Journal of the Indian Mathematical Society.

186. Transactions of the American Mathematical Society.

187. Turkish Journal of Mathematics.

188. Vietnam Journal of Mathematics.

189. Wave Motion.

190. ZAA.

191. ZAMM.

## Numbers of Reviewed Papers

- 2020: 137 papers
- 2019: 172 papers
- 2018: 129 papers
- 2017: 116 papers
- 2016: 102 papers
- 2015: 130 papers
- 2014: 130 papers
- 2013: 115 papers
- 2012: 114 papers
- 2011: 140 papers
- 2010: 169 papers
- 2009: 219 papers
- 2008: 121 papers
- 2007: 117 papers
- 2006: 109 papers
- 2005: 53 papers

## Reviewer for the following Book Publishers

1. Brooks/Cole.
2. CRC Press.
3. DeGruyter.
4. Harcourt Academic Press.
5. Houghton Mifflin.
6. John Wiley & Sons.
7. Springer.
8. Taylor & Francis.

## Reviewer for the following Agencies

1. Grant Agency of the Academy of Sciences of the Czech Republic (5 proposals).
2. Academy Council of the Czech Academy of Sciences (30 proposals).
3. Engineering and Physical Science Research Council (1 proposal).
4. Estonian Science Foundation (3 proposals).
5. Mathematical Reviews (247 reviews).
6. National Science Foundation (4 proposals).
7. Natural Sciences and Engineering Research Council of Canada (1 proposal).

8. University of Missouri Research Board (12 proposals since 2002).

9. Kentucky Science and Engineering Foundation (1 proposal).

10. Louisiana Board of Regents (1 proposal).

11. FWF Austrian Science Fund (1 proposal).

12. ARISE, African Research Initiative for Scientific Excellence (2 proposals).

## Other

1. Wrote letters for promotion & tenure and promotion cases (18 letters in 2006–2011, 7 letters in 2012–2013).

2. Wrote recommendation letters for researchers' job searches at universities (57 letters in 2006–2011, 24 letters in 2012–2013).

3. Wrote recommendation letters for students (43 letters in 2006–2011, 17 letters in 2012–2013).

4. Wrote reports on PhD theses as external jury member (8 reports in 2006–2011, 4 reports in 2012–2013).

## 2.3 Service to Missouri S&T

1. Campus Promotion and Tenure Committee (2020–2023).
2. College Promotion and Tenure Committee (2020–2023).
3. Curators' Distinguished Professor and Curators' Distinguished Teaching Professor Five Year Review Committee (2020–2025). Chair 2020.
4. Faculty Excellence Award Selection Committee (2020–2023).
5. Tenure Policy Committee, Missouri S&T (2018–2020).
6. J-1 Exchange Visitor Advisory Committee, Missouri S&T (since 2018).
7. Faculty Research Award Selection Committee (2015–2021). Chair 2020.
8. Department Promotion and Tenure Committee (2020–2023). Chair 2020.
9. Vice President, Missouri Association of Faculty Senates (MAFS), Missouri (2016–2018).
10. Faculty External Rewards and Recognition Committee (2015–2017).
11. S&T Internationalization and Global Engagement Committee (2015–2018).
12. myVITA Preview Testing Committee (2015–2016).
13. Chair, Rules, Procedures, and Agenda Committee, Missouri S&T (2015–2016).
14. Past President, Missouri S&T Faculty Senate (2015–2016).
15. Co-Chair, Campus Sexual Assault Prevention and Strategic Curriculum Committee, Missouri S&T (2014–2016).

16. Special Task Force for Special Assistant to the Provost, Missouri S&T (2014–2015).

17. Office Support Associate Search Committee, Missouri S&T Provost Office (October 2014).

18. President, Missouri S&T Faculty Senate (2014–2015).

19. Vice-President, Missouri S&T General Faculty (2014–2015).

20. Faculty Bylaws Revision Committee, Missouri S&T (2014).

21. IFC Faculty Workload Policy Taskforce, University of Missouri System (2013–2014).

22. Strategic Planning Committee, Department of Mathematics and Statistics (2013–2014).

23. President-Elect, Missouri S&T Faculty Senate (2013–2014).

24. Intercampus Faculty Council (IFC), University of Missouri System (2013–2016).

25. Missouri Association of Faculty Senates (MAFS), Missouri (2013–2018).

26. Faculty Service Award Selection Committee (2013).

27. Vice Chancellor (Finance and Administration) Search Committee (2013).

28. Chair Search Committee, Department of Mathematics (2012–2013).

29. Secretary, Missouri S&T Faculty Senate (2012–2013).

30. Faculty Research Award Selection Committee (2012).

31. Parliamentarian, Missouri S&T Faculty Senate (2011–2012).

32. Faculty Senate (2011–2018).

33. Rules, Procedures, and Agenda Committee (2011–2016).

34. Colloquium Chair (2008–2009).

35. Academic Council (2000–2007).

36. Tenure Committee (2005–2007).

37. Five-Year Program Review Committee, UM/CBHE Review of the Student Design and Experiential Learning Center (2006).

38. Organizer of the "Time Scales Seminar" (since 2005).

39. Organizer of the "Analysis Seminar" (1998–2001), co-organizer (2002–2006).

40. Textbook Selection Committee for Math 204 (2005).

41. Mathematics and Statistics Graduate Policy Committee (2001–2003, 2006–2007).

42. Mathematics and Statistics Web Page Committee (2001).

43. Student Affairs Committee (2002–2003).

44. Course Coordinator Math 15 (2005–2007).

45. Financial Engineering Association, Missouri S&T, faculty member (since 2006).

46. Actuarial Society, Missouri S&T, faculty member (since 2007).

47. Mentor for the MU program "Preparing Future Faculty", Mentee: Don Vaught (excerpt from the official PFF brochure: "The seminars have enlightened me on several issues. My mentor relationships have been terrific, even leading to actual professional work. This has been one of the best programs I ever stumbled into" – Don Vaught), 2004.

48. Participant at Teaching Renewal Conference, University of Missouri–Columbia, Columbia, Missouri, February 24–26, 2005.

49. Participant at Reaching and Teaching the Digital Native: The Digital Campus Institute @ Missouri, Columbia, Missouri, April 2–4, 2007.

50. Initiator of the Mathematics Learning Center (2004–2007), in cooperation with Missouri S&T's LEAD (Learning Enhancement Across Disciplines) program. The MLC is designed to prepare the students for homework, quizzes, and exams, improve their learning skills and understanding, develop teamwork and personal leadership skills, and encourage small-group cooperative/collaborative learning. Attended luncheons on the LEAD program. Designed LEAD posters for Math 15 that were posted throughout the campus.

51. Initiated the use of a Personal Response System in the Mathematics Department. An active member of the "clicker community". Regularly attended the clicker luncheon series organized by CERTI.

52. Attended the workshop "TA Development Using Case Studies" in Evanston, IL (October 23–24, 2004) and initiated the presentation of case studies for teaching assistants in our department. Conducted several case studies open for all GTAs.

53. Organizer of the student exchange between Missouri S&T and Universität Ulm, Ulm, Germany, since 2002.

54. Introduced an interdisciplinary course "Financial Mathematics", designed by myself and Professor Gelles from the Economics & Finance Department. This course is co-listed as Econ 337 and Math 337. Also designed the course "Financial Mathematics II" and taught it.

55. Designed a "Graduate Certificate Program in Financial Mathematics" that was approved and already completed by several students, since 2006.

# Chapter 3

# Teaching

## 3.1 Classes Taught

- Fall 2020: Lecturer in 'Calculus and Analytic Geometry III' and "Financial Mathematics I" (Missouri S&T).
- Fall 2019: Lecturer in 'Elementary Differential Equations', two sections (Missouri S&T).
- Fall 2018: Lecturer in 'Calculus with Analytic Geometry III' and 'Financial Mathematics I' (Missouri S&T).
- Spring 2018: Lecturer in 'Elementary Differential Equations' and 'Advanced Calculus I' (Missouri S&T).
- Fall 2016: Lecturer in 'Engineering Statistics' and 'Financial Mathematics I' (Missouri S&T).
- Fall 2015: Lecturer in 'Elementary Differential Equations' and 'Financial Mathematics I' (Missouri S&T).
- Fall 2014: Lecturer in 'Financial Mathematics I' (Missouri S&T).
- Spring 2014: Lecturer in 'Elementary Differential Equations' and 'Financial Mathematics II' (Missouri S&T).
- Fall 2013: Lecturer in 'Elementary Differential Equations' and 'Financial Mathematics I' (Missouri S&T).
- Fall 2012: Lecturer in 'Elementary Differential Equations' and 'Financial Mathematics I' (Missouri S&T).

- Spring 2012: Lecturer in two sections of 'Engineering Statistics' (Missouri S&T).
- Fall 2011: Lecturer in 'Elementary Differential Equations' and 'Financial Mathematics I' (Missouri S&T).
- Spring 2011: Lecturer in 'Partial Differential Equations' (Middle East Technical University).
- Fall 2010: Lecturer in 'Fixed Income Models' (Universität Ulm).
- Spring 2010: Lecturer in 'Elementary Differential Equations' and 'Financial Mathematics I' (Missouri S&T).
- Fall 2009: Lecturer in 'Engineering Statistics' and 'Financial Mathematics II' (Missouri S&T).
- Spring 2009: Lecturer in 'Elementary Differential Equations' and 'Financial Mathematics I' (Missouri S&T).
- Fall 2008: Lecturer in 'Elementary Differential Equations' and 'Financial Mathematics II' (Missouri S&T).
- Spring 2007: Lecturer in 'Calculus for Engineers II' (Course Coordinator) and 'Financial Mathematics I' (University of Missouri–Rolla).
- Fall 2006: Lecturer in 'Calculus for Engineers II' (Course Coordinator) and 'Financial Mathematics II' (University of Missouri–Rolla).
- Spring 2006: Lecturer in 'Calculus for Engineers II' (Course Coordinator) and 'Financial Mathematics I' (University of Missouri–Rolla).

- Fall 2005: Lecturer in 'Calculus for Engineers II' (Course Coordinator) and 'Advanced Calculus I' (University of Missouri–Rolla).

- Spring 2005: Lecturer in 'Calculus for Engineers II' (Course Coordinator) and 'Introduction to Real Analysis' (University of Missouri–Rolla).

- Fall 2004: Lecturer in 'Calculus for Engineers II' (Course Coordinator) and 'Partial Differential Equations' (University of Missouri–Rolla).

- Spring 2004: Lecturer in 'Calculus for Engineers II' and 'Advanced Calculus II' (University of Missouri–Rolla).

- Fall 2003: Lecturer in 'Elementary Differential Equations' and 'Advanced Calculus I' (University of Missouri–Rolla).

- Spring 2003: Lecturer in 'Engineering Statistics' and 'Advanced Calculus II' (University of Missouri–Rolla).

- Fall 2002: Lecturer in 'Engineering Statistics' and 'Advanced Calculus I' (University of Missouri–Rolla).

- Spring 2002: Lecturer in 'Discrete Mathematics' and 'Linear Algebra and Differential Equations' (Florida Institute of Technology).

- Fall 2001: Lecturer in 'Discrete Mathematics' and 'Deterministic Operations Research Models' (Florida Institute of Technology).

- Spring 2001: Lecturer in 'Introduction to Probability and Statistics' and 'Introduction to Real Analysis' (University of Missouri–Rolla).

- Fall 2000: Lecturer in 'Calculus with Analytic Geometry I' and 'Elementary Differential Equations' (University of Missouri–Rolla).

- Spring 2000: Lecturer in 'Matrix Algebra' and 'Functional Analysis II' (University of Missouri–Rolla).

- Fall 1999: Lecturer in 'Elementary Differential Equations' and 'Functional Analysis I' (University of Missouri–Rolla).

- Spring 1999: Lecturer in 'Calculus with Analytic Geometry I' and 'Partial Differential Equations' (University of Missouri–Rolla).

- Fall 1998: Lecturer in 'Matrix Algebra' and 'Partial Differential Equations' (University of Missouri–Rolla).

- Summer 1998: Lecturer in 'Advanced Calculus I' and 'Discrete Mathematics' (San Diego State University).

- Spring 1998: Lecturer in 'Calculus II' (San Diego State University).

- Fall 1997: Lecturer in 'Calculus I' (San Diego State University).

- Winter 1996/97: Assistant Lecturer in 'Mathematics for Business Students I' and 'Applied Statistics for Nutrition Scientists' (Universität Hohenheim).

- Summer 1996: Assistant Lecturer in 'Mathematics for Business Students II', 'Mathematical Statistics II', and 'Financial Mathematics' (Universität Hohenheim).

- Winter 1995/96: Assistant Lecturer in 'Mathematics for Business Students I', 'Mathematical Statistics I', and 'Applied Statistics for Nutrition Scientists' (Universität Hohenheim).
- Spring 1994: Lecturer in 'Operations Research II' (Berufsakademie Heidenheim).
- Fall 1994: Lecturer in 'Operations Research I' (Berufsakademie Heidenheim).
- Summer 1993: Teaching Assistant in 'Differential Equations II' (Universität Ulm).
- Winter 1992/93: Teaching Assistant in 'Quantum Structures and Hilbert Space Theory' (Universität Ulm).
- Spring 1991: Lecturer in 'College Algebra' (San Diego State University).
- Fall 1991: Lecturer in 'College Algebra' (San Diego State University).
- Summer 1991: Teaching Assistant in 'Calculus II' and 'Linear Algebra II' (Universität Ulm).
- Winter 1990/91: Teaching Assistant in 'Calculus I' and 'Linear Algebra I' (Universität Ulm).
- Summer 1990: Teaching Assistant in 'Calculus II' and 'Linear Algebra II' (Universität Ulm).
- Winter 1989/90: Teaching Assistant in 'Calculus I' and 'Linear Algebra I' (Universität Ulm).
- Summer 1989: Grader in 'Calculus II' (Universität Ulm).

- Winter 1988/89: Grader in ‘Calculus I’ (Universität Ulm).

## 3.2 Students

### Advisees

1. Pei Yong (postdoc advisor): 2018–2019.
2. Churong Chen (PhD advisor): 2018–2019.
3. Nagham Al Qubbanchee (MS advisor): Since 2019.
4. Emin Beso (PhD advisor): Since 2018.
5. Veysel Fuat Hatipoğlu (postdoc advisor): 2017–2018.
6. Rasheed Al-Salih (PhD advisor): "Programming problems on time scales: Theory and computation", November 8, 2017.
7. Serifenur Cebesoy (postdoc advisor): 2016–2017.
8. Thomas Griebel (MS committee chair), thesis: "The pantograph equation in quantum calculus" March 15, 2017.
9. Johannes Ruppert (MS committee chair), thesis: "Pricing of geometric Asian options in general affine stochastic volatility models", March 16, 2016.
10. Tom Cuchta (PhD advisor): "Discrete analogues of some classical special functions", October 28, 2015.
11. Sabrina Streipert (PhD advisor): "Discrete and dynamic population models with logistic growth rate", April 8, 2015.
12. Nasrin Sultana (PhD advisor): "Volterra difference equations", April 7, 2015.

13. Mazen Ali (MS committee chair), thesis: "Adaptive wavelet discretization of tensor products in $\mathcal{H}$-Tucker format", May 2, 2014.

14. Yelda Aygar (postdoc advisor), 2013–2014.

15. Thomas St. George (PhD external committee member): "Nodal solutions of nonlinear boundary value problems with multi-point boundary conditions", September 19, 2013.

16. Julius Heim (PhD advisor): "Economics and finance on time scales", April 27, 2012.

17. Rotchana Chieochan (PhD advisor): "Periodic $q$-difference equations", April 26, 2012.

18. Sabrina Streipert (MS committee chair), thesis: "Abel dynamic equations of the first and the second kind", April 23, 2012.

19. Thomas Matthews (PhD advisor): "Probability theory on time scales and applications to finance and inequalities", November 7, 2011.

20. Matthias Noller (MS committee chair), thesis: "A time series approach to electric load modelling", June 17, 2011.

21. Andrew Clum (OURE advisor, Opportunities for Undergraduates in Research), thesis: "Exploration of partial $h$-difference and $q$-difference equations", April 2011.

22. Mathias Göggel (Diplomarbeit, Universität Ulm, committee chair), thesis: "Closed-form solutions to portfolio optimization problems on isolated time scales", November 29, 2010.

23. Keara Wright (MS committee chair), nonthesis option, comprehensive exam on November 4, 2010.

24. Nathan Harl (PhD out-of-department committee member), November 2, 2010.

25. Rui Ferreira (PhD advisor): "Calculus of variations on time scales and discrete fractional calculus", July 26, 2010.

26. Mathias Göggel (MS committee chair), thesis: "Closed-form solutions to discrete-time portfolio optimization problems", May 6, 2010.

27. Nick Wintz (PhD advisor): "The Kalman filter on time scales", June 1, 2009.

28. Karl Ulrich (MS committee chair), thesis: "The analogue of the iterated logarithm for quantum difference equations", May 1, 2009.

29. Christian Keller (MS committee chair), thesis: "Dynamic equations with piecewise continuous argument", May 12, 2008.

30. Julius Heim (MS committee chair), thesis: "The dynamic multiplier-accelerator model in economics", May 12, 2008.

31. Suman Sanyal (PhD advisor): "Stochastic dynamic equations on time scales", December 7, 2007.

32. Christian Müttel (MS committee chair), thesis: "The Black–Scholes equation in quantum calculus", May 9, 2007.

33. Thomas Matthews (MS committee chair), thesis: "Ostrowski and Grüss inequalities on time scales", May 9, 2007.

34. Thomas Hudson (OURE advisor, Opportunities for Undergraduates in Research), thesis: "Euler-type boundary value problems in quantum calculus", May 2006.

35. Adam Panagos (PhD out-of-department committee member), March 13, 2006.

36. Christopher Nnadili (MS out-of-department committee member), November 17, 2005.

37. Ahmed Usman (MS committee chair), May 2005.

38. Alexej Kytmanov (PhD committee member), May 2005.

39. Murat Adıvar (postdoc advisor), Spring 2004.

40. Howard Warth (MS committee chair), May 2004.

41. Jun Zhou (PhD out-of-department committee member), August 22, 2003.

42. Todd Sparks (MS out-of-department committee member), April 16, 2003.

43. Dirk Rohmeder (MS committee member), April 15, 2003.

44. Bob Metzger (PhD external committee member), November 28, 2001.

45. Changlin Sun (PhD out-of-department committee member), July 23, 2001.

46. Donald Myers (BA advisor), May 2001.

47. Wenhai Zhang (PhD out-of-department committee member), April 26, 2001.

48. Fanlin Zhu (PhD out-of-department committee member), April 23, 2001.

49. Ben Meyers (MS out-of-department committee member), May 2000.

50. Cannon Watts (MS committee chair), May 2000.

51. Christina Morian (PhD external committee member), March 17, 2000.

## Exchange Students Ulm–Rolla

1. Fall 2019–Spring 2020: Lioba Boveleth.

2. Fall 2018–Spring 2019: Louis Steinmeister.

3. Fall 2017–Spring 2018: Tobias Merk and Marcel Trick.

4. Fall 2016–Spring 2017: Thomas Griebel.

5. Fall 2015–Spring 2016: Johannes Ruppert and Larissa Schoepf.

6. Fall 2013–Spring 2014: Mazen Ali.

7. Fall 2011–Spring 2012: Sabrina Streipert and Jens-Uwe Reitinger.

8. Fall 2010–Spring 2011: Matthias Noller.

9. Fall 2009–Spring 2010: Mathias Göggel.

10. Fall 2008–Spring 2009: Karl Ulrich.

11. Summer 2008: John Seiffert (Missouri S&T student in Ulm)

12. Fall 2007–Spring 2008: Julius Heim and Christian Keller.

13. Summer 2007: Lauren Bengston and Jamie Calvert (UMR students in Ulm)

14. Fall 2006–Spring 2007: Thomas Matthews and Christian Müttel.

15. Fall 2005–Spring 2006: Tim Jensen and Stefan Körner.

16. Fall 2004–Spring 2005: Patrik Czornik and Matthias Frank.

17. Fall 2002–Spring 2003: Dirk Rohmeder.

18. Fall 2001–Spring 2002: Kathrin Kötting and Florian Rück.

# Chapter 4

# Research

## 4.1 Conferences

1. International Conference on Applied Nonlinear Analysis and Soft Computing, Gauhati University, India, December 22–23, 2020 (plenary speaker).

2. Dynamic Equations on Time Scales, Banach Center, Będlewo, Poland, August 26–30, 2020 (plenary speaker).

3. International Workshop on Differential Equations and Applications, Mother Teresa Women's University, Kodaikanal, Tamilnadu, India, January 28–29, 2020 (keynote speaker).

4. ICMMCMSE2020, Second International Conference on Mathematical Modeling and Computational Methods in Science and Engineering, Alagappa University, Karaikudi, Tamilnadu, India, January 22–24, 2020 (keynote speaker).

5. MAA Missouri Spring Meeting 2019, Lindenwood University, St. Charles, April 4–6, 2019 (plenary speaker).

6. International Conference on Differential and Difference Equations and Applications, Lisbon, Portugal, July 1–5, 2019 (main speaker).

7. ICDEA 2019, Twentyfifth International Conference on Difference Equations and Applications, London, UK, June 24–28, 2019.

8. APPLMATH2019, Messina, Italy, June 18, 2019 (invited speaker).

9. NUMTA2019, Numerical Computations: Theory and Algorithms, Crotone, Italy, June 15–21, 2019 (invited speaker).

10. Dynamic Equations on Time Scales, Banach Center, Będlewo, Poland, June 12–16, 2019 (plenary speaker).

11. MAA Missouri Spring Meeting 2019, Lindenwood University, St. Charles, April 4–6, 2019 (plenary speaker).

12. ICMC Summer Meeting on Differential Equations, São Carlos, Brazil, February 4–6, 2019 (plenary speaker).

13. 2nd IMA Conference on Theoretical and Computational Discrete Mathematics, Derby, UK, September 14–15, 2018 (plenary speaker).

14. International Workshop on Nonlinear Dynamical Systems and Functional Analysis, Brasília, Brazil, August 13–16, 2018 (plenary speaker).

15. Bosnian Conference on Mathematical Sciences, Sarajevo, Bosnia and Herzegovina, July 12–14, 2018 (plenary speaker).

16. Dynamic Equations on Time Scales, Banach Center, Będlewo, Poland, May 30–June 3, 2018 (plenary speaker).

17. ICDEA 2018, Twentyfourth International Conference on Difference Equations and Applications, Dresden, Germany, May 21–25, 2018.

18. XI Congresso GAFEVOL, Brasilia, Brasil, October 23–26, 2017 (plenary speaker).

19. TREPAM 2017, Recent Trends in Pure and Applied Mathemamtics, Alba Iulia, Romania, July 31 – August 4, 2017.

20. ICDEA 2017, Twentythird International Conference on Difference Equations and Applications, Timişoara, Romania, July 24–28, 2017.

21. International Conference on Differential and Difference Equations and Applications, Amadora, Portugal, June 5–9, 2017 (main speaker).

22. IX Summer Workshop on Mathematics, Brasilia, Brazil, February 13–17, 2017 (Analysis Section).

23. ICMC Summer Meeting on Differential Equations, São Carlos, Brazil, February 6–8, 2017 (plenary speaker).

24. Workshop de Mathematica - Verao 2017, Juiz de Fora, Brazil, January 19–20, 2017 (plenary speaker).

25. International Conference on Biotechnology and Bioengineering, Bangkok, Thailand, December 8–10, 2016 (member of Scientific Committee).

26. Third International Conference on Analysis and Applied Mathematics (ICAAM 2016), Almaty, Kazakhstan, September 7–10, 2016 (member of International Advisory Board).

27. The 2nd Conference on Ordinary Differential Equations and Dynamical Systems, Suzhou, China, July 25–27, 2016 (member of Technical Program Committee).

28. International Conference on Applied Mathematics and Analysis in Memory of Gusein Sh. Guseinov, Ankara, Turkey, July 11-13, 2016 (plenary speaker).

29. New Trends in the Applications of Differential Equations in Science, NTADES 2016, Sofia, Bulgaria, July 4–9, 2016 (plenary speaker).

30. 7th Podlasie Conference on Mathematics, Bialystok, Poland, June 8–11, 2016 (plenary speaker).

31. O.D. Equations Brno 2016, Conference in honor of Professor Dr. Ondrej Dosly on the occasion of his 60th birthday, Brno, Czech Republic, June 6–8, 2016 (plenary speaker).

32. ICRAPAM 2016, International Conference on Recent Advances in Pure and Applied Mathematics, Bodrum, Turkey, May 19–23, 2016 (Honorary Chair of Scientific Committee)

33. PODE2016, Riga, Latvia, May 17–20, 2016 (member of Scientific Committee)

34. ICMME2016, Interenational Conference on Mathematics and Mathematics Education, Elazig, Turkey, May 12–14, 2016 (member of Scientific Committee).

35. 4th International Conference on Mathematical, Computational and Statistical Sciences, Barcelona, Spain, February 13–15, 2016 (member of Scientific Committee).

36. International Meeting on Applied Mathematics, Errachidia, Morocco, May 9-12, 2016 (member of Scientific Committee).

37. Encontro de Verao em Matematica Aplicavel na UNESP, Ilha Solteira, Brazil, October 19–23, 2015 (presenter of short course).

38. International Conference on Pure and Applied Mathematics, Van, Turkey, July 23–26, 2015 (member of Scientific Committee).

39. ICDEA 2015, Twentyfirst International Conference on Difference Equations and Applications, Białystok, Poland, July 20–25, 2015 (plenary speaker).

40. Conference on Ordinary Differential Equations and Dynamical Systems, Shanghai, China, July 19–21, 2015 (member of Technical Program Committee).

41. PODE 2015, Progress on Difference Equations, Covilha, Portugal, June 15–18, 2015 (Chair of Scientific Committee and plenary speaker).

42. ICRAPAM 2015, International Conference on Recent Advances in Pure and Applied Mathematics, Istanbul, Turkey, June 3–6, 2015 (plenary speaker).

43. Third International Conference on Applied Mathematics and Approximation Theory, Ankara, Turkey, May 28–31, 2015 (plenary speaker).

44. International Conference on Differential and Difference Equations and Applications, Amadora, Portugal, May 18–22, 2015 (main speaker).

45. Conference on Partial Differential Equations, Munich, Germany, March 25–29, 2015 (member of Organizing Committee).

46. Missouri Section of the MAA Spring 2015 Meeting, Rolla, Missouri, March 27–28, 2015 (plenary speaker).

47. Summer Workshop on Differential Equations and Dynamic Equations on Time Scales, Ribeirão Preto, Brazil, February 19–20, 2015 (presenter of short course).

48. VII Summer Workshop on Mahematics, Brasilia, Brazil, February 9–12, 2015 (plenary speaker).

49. ICMC Summer Meeting on Differential Equations, São Carlos, Brazil, February 2–4, 2015 (plenary speaker).

50. The 3rd Abu Dhabi University Annual International Conference: Mathematical Science and Applications, Abu Dhabi University, Abu Dhabi, United Arab Emirates, December 27–30, 2014 (member of Scientific Committee and plenary speaker).

51. SDEDE 2014, Symposium on Differential Equations and Difference Equations, Homburg, Germany, September 5–8, 2014 (Scientific Director).

52. Third National Seminar on Applied Mathematics, Linyi University, Linyi, China, August 4–6, 2014 (plenary speaker, also opening of the Liu Hong Applied Mathematics Center).

53. Conference on Dynamical Systems and Applications (dedicated to Professor Peter Kloeden on the occasion of his 65th birthday), Huazhong University of Science and Technology, Wuhan, China, July 26–30, 2014 (plenary speaker).

54. ICDEA 2014, Twentieth International Conference on Difference Equations and Applications, Wuhan, China, July 21–25, 2014 (plenary speaker).

55. The 10th AIMS Conference on Dynamical Systems, Differential Equations and Applications, Madrid, Spain, July 7–11, 2014 (organizer of an AIMS Special Session on "Dynamics with Fractional and Time Scale Derivatives", jointly with Natalia Martins and Delfim Torres).

56. CDDEA 2014, Conference on Differential and Difference Equations and Applications, Jasna, Solvakia, June 23–27, 2014 (member of Scientific Committee).

57. CoPDE 2014, Conference on Partial Differential Equations, Novacella, Italy, May 28–June 1, 2014 (member of Organizing Committee and invited speaker).

58. ATA 2014, Analysis, Topology, and Applications Vrnjacka Banja, Serbia, May 26–29, 2014 (member of Scientific Committee).

59. PODE 2014, Progress on Difference Equations, Izmir University of Economics, Izmir, Turkey, May 21–24, 2014 (member of Scientific Committee and plenary

speaker).

60. Festcolloquium in honor of Professor Dr. Werner Kratz on the occasion of his retirement, Universität Ulm, Ulm, Germany, February 17, 2014 (plenary speaker).

61. The Second Abu Dhabi University Annual International Conference: Mathematical Science and Applications, Abu Dhabi University, Abu Dhabi, United Arab Emirates, November 29–December 1, 2013 (member of Scientific and Advisory Committee).

62. Peterson Conference, University of Lincoln–Nebraska, Lincoln, Nebraska, October 25–27, 2013 (plenary speaker).

63. Special Session on "Fixed Point Theorems and Applications to Inegral, Difference, and Differential Equations" at the AMS Meeting #1092 (2013 Fall Southeastern Section Meeting), University of Louisville, Louisville, Kentucky, October 5–6, 2013 (invited speaker).

64. SDEDE 2013, Symposium on Differential Equations and Difference Equations, Bayrischzell, Germany, September 1–5, 2013 (plenary speaker).

65. PODE 2013, Progress on Difference Equations, Bialystok, Poland, July 20–26, 2013 (plenary speaker).

66. Anatolian Communications in Nonlinear Analysis, Bolu, Turkey, July 3–6, 2013 (main speaker).

67. The Cape Verde International Days on Mathematics 2013, Praia, Cape Verde, April 22–25, 2013 (member of Scientific Committee).

68. International Conference: Mathematical Science and Applications, Abu Dhabi University, Abu Dhabi, United Arab Emirates, December 26–31, 2012 (member of Scientific and Advisory Committee).

69. International Conference on the Theory, Methods and Applications of Nonlinear Equations), Texas A&M University, Kingsville, Texas, December 17–21, 2012 (organizer of a special session).

70. Symposium on Biomathematics and Ecology Education and Research, St. Louis, Missouri, November 9–11, 2012 (invited speaker and organizer of a special session).

71. Symposium on Differential Equations and Difference Equations, Abbazia di Novacella, Italy, October 28–November 1, 2012 (plenary speaker).

72. Mathematical Inequalities and Nonlinear Functional Analysis with Applications, Cheju Island, Korea, July 25–29, 2012 (member of Scientific Committee).

73. International Conference on Pure and Applied Mathematics, Guelma, Algeria, May 28–30, 2012 (member of Scientific Committee).

74. Analysis, Topology, and Applications 2012, Sombor, Serbia, May 25–27, 2012 (plenary speaker).

75. International Conference on Applied Mathematics and Approximation Theory, Ankara, Turkey, May 17–19, 2012 (plenary speaker).

76. ICMC Summer Meeting on Differential Equations, 2012 Chapter, São Carlos, Brazil, February 6–8, 2012 (plenary speaker).

77. Special Session on "Dynamic Equations on Time Scales" at the AMS Meeting #1074 (2011 Fall Central Section Meeting), University of Nebraska–Lincoln, Lincoln, Nebraska, October 14–16, 2011 (invited speaker).

78. International Conference on Differential and Difference Equations and Applications, Ponta Delgada, Azores, Portugal, July 4–8, 2011 (main speaker).

79. International Conference on Applied Analysis and Algebra, Istanbul, Turkey, June 29 – July 2, 2011 (plenary speaker).

80. The Sixth Ankara Math Days, Ankara, Turkey, June 2–3, 2011 (plenary speaker).

81. Dynamical System Modeling and Stability Investigation, Kyiv, Ukraina, May 25–27, 2011 (member of Scientific Committee and plenary speaker).

82. REMIA 2010, Plovdiv, Bulgaria, December 10–12, 2010 (member of Scientific Committee).

83. Functional Differential Equations and Applications, Ariel, Israel, August 29 – September 2, 2010 (plenary speaker).

84. Sixth International Conference on Dynamical Systems and Applications, Antalya, Turkey, July 10–14, 2010 (plenary speaker).

85. Analysis, Topology, and Applications 2010, Vrnjacka Banja, Serbia, June 20–25, 2009 (plenary speaker).

86. The 8th AIMS Conference on Dynamical Systems, Differential Equations and Applications, Dresden, Germany, May 25–28, 2010 (organizer of an AIMS Special Session on "Differential, Difference, and Dynamic Equations", jointly with Stefan Hilger and Ağacik Zafer).

87. Festcolloquium in honor of Professor Donald A. Lutz on the occasion of his 70th birthday, San Diego, California, March 29, 2010 (organizer).

88. Joint Mathematics Meetings, San Francisco, California, January 13–16, 2010 (organizer of an AMS Special Session on "Applications of Time Scales to Biology, Economics, and Engineering", jointly with Billur Kaymakçalan and Allan Peterson).

89. Special Session on "Dynamic Equations on Time Scales" at the AMS Meeting #1051 (2009 Fall Central Section Meeting), Baylor University, Waco, Texas, October 16–18, 2009 (invited speaker).

90. Equadiff 12, Brno, Czech Republic, July 20–24, 2009 (main speaker).

91. Recent Developments in Dynamic Equations on Time Scales, Rocky Mountain Mathematics Consortium, Laramie, Wyoming, June 8–19, 2009 (plenary speaker).

92. SEARCDE28, 28th Annual Southeastern-Atlantic Regional Conference on Differential Equations, Little Rock, Arkansas, October 10–11, 2008 (plenary speaker).

93. Symposium on Biomathematics and Ecology Education and Research, Normal, Illinois, September 6–7, 2008 (plenary speaker).

94. ICDEA2008, Fourteenth International Conference on Difference Equations and Applications, Istanbul, Turkey, July 21–25, 2008 (organizer).

95. Conference in Honor of Allan Peterson, Abbazia di Novacella, Italy, July 28 – August 2, 2007 (plenary speaker).

96. ICDEA2007, Twelfth International Conference on Difference Equations and Applications, Lisbon, Portugal, July 23–27, 2007 (invited speaker).

97. Reaching and Teaching the Digital Native: The Digital Campus Institute @ Missouri, Columbia, Missouri, April 2–4, 2007.

98. Joint Mathematics Meetings, New Orleans, Louisiana, January 5–8, 2007 (organizer of a Special Session on "Dynamic Equations with Applications", jointly with Allan Peterson).

99. ICDEA2006, Eleventh International Conference on Difference Equations and Applications, Kyoto, Japan, July 24–28, 2006 (main speaker).

100. Marrakesh World Conference on Differential Equations and Applications, Marrakesh, Morocco, June 15–20, 2006 (plenary speaker).

101. Web Conference on Feedback Devices and Effective Pedagogy, University of Missouri–Rolla, Rolla, Missouri, February 2, 2006.

102. Joint Mathematics Meetings, San Antonio, Texas, January 12–15, 2006 (organizer of a Special Session on "Dynamic Equations with Applications", jointly with Allan Peterson).

103. Special Session on "Dynamic Equations on Time Scales" at the AMS Meeting #1011 (2005 Fall Central Section Meeting), University of Nebraska–Lincoln, Lincoln, Nebraska, October 21–23, 2005 (invited speaker).

104. International Conference on Difference Equations, Special Functions and Applications, ICDEA2005, Tenth International Conference on Difference Equations and Applications, Munich, Germany, July 25–30, 2005 (plenary speaker).

105. The First International Workshop on Dynamic Equations on Time Scales, Istanbul, Turkey, June 27 – July 1, 2005 (organizer of conference, jointly with Okay Çelebi and Mehmet Ünal; plenary speaker).

106. Joint International Meeting, Mainz, Germany, June 16–19, 2005 (organizer of a Special Session on "Ordinary Differential, Difference, and Dynamic Equations", jointly with Werner Balser and Donald Lutz).

107. Easter Academy on Difference Equations, Special Functions and Applications, AbiTUMath 2005, Abbazia di Novacella, Italy, March 28 – April 1, 2005 (plenary speaker).

108. Teaching Renewal Conference, University of Missouri–Columbia, Columbia, Missouri, February 24–26, 2005.

109. Joint Mathematics Meetings, Atlanta, Georgia, January 5–8, 2005 (organizer of an AMS-SIAM Special Session on "Dynamic Equations on Time Scales", jointly with Billur Kaymakçalan and Allan Peterson).

110. 24th Annual Western Kentucky University Mathematics Symposium, Bowling Green, Kentucky, November 19–20, 2004 (one of two featured speakers).

111. TA Development Using Case Studies: A Workshop for Faculty, AMS Meeting #1001 (2004 Fall Central Section Meeting), Northwestern University, Evanston, Illinois, October 23–24, 2004.

112. Dynamical Systems and Applications, Antalya, Turkey, July 5–10, 2004 (plenary speaker).

113. Special Session on "Dynamic Equations on Time Scales: Theory and Applications" at the AMS Meeting #996 (2004 Spring Western Section Meeting), University of Southern California, Los Angeles, California, April 3–4, 2004 (invited speaker).

114. Joint Mathematics Meetings, Phoenix, Arizona, January 7–10, 2004 (organizer of a Special Session on "Time Scales and Applications", jointly with Billur Kaymakçalan and Allan Peterson).

115. ICDEA2003, Eighth International Conference on Difference Equations and Applications, Brno, Czech Republic, July 28 – August 1, 2003 (invited speaker).

116. The Fourth International Conference on Dynamic Systems and Applications, Atlanta, Georgia, May 21–24, 2003 (organizer of the "Workshop on Time Scales and Applications", jointly with Joan Hoffacker and Billur Kaymakçalan).

117. Special Session on "Recent Trend of the Analysis and Computations of Functional Differential Equations" at the AMS Meeting #985 (2003 Spring Central Section Meeting), Bloomington, Indiana, April 4–6, 2003 (invited speaker).

118. Time Scales Workshop, Dayton, Ohio, September 20–21, 2002 (main speaker).

119. Dynamic Equations on Time Scales and Their Applications, Rocky Mountain Mathematics Consortium, summer school, Laramie, Wyoming, July 8–19, 2002 (one of two featured speakers, jointly with Allan Peterson; each featured speaker gave ten 75-minutes presentations).

120. Special Session on "Dynamic Equations on Time Scales" at the AMS Meeting #975 (2002 Spring Southeastern Section Meeting), Atlanta, Georgia, March 8–10, 2002 (organizer of session, jointly with Billur Kaymakçalan).

121. Joint Mathematics Meetings, San Diego, California, January 6–9, 2002 (organizer of a Special Session on "Dynamic Equations on Time Scales", jointly with Billur Kaymakçalan).

122. Special Session on "Asymptotic Behavior of Solutions of Differential and Difference Equations" at the AMS Meeting #970 (2001 Fall Southeastern Section Meeting), Chattannooga, Tennessee, October 5–6, 2001 (invited speaker).

123. ICDEA2001, Sixth International Conference on Difference Equations and Applications, Augsburg, Germany, July 30 – August 3, 2001 (plenary speaker).

124. SIAM SEAS Annual Conference, Myrtle Beach, South Carolina, March 16–17, 2001 (organizer of a Special Session on "Dynamic Equations on Time Scales", jointly with Billur Kaymakçalan).

125. Special Session on "Differential Operators and Function Spaces" at the AMS Meeting #960 (2000 Fall Southeastern Section Meeting), Birmingham, Alabama, November 10–12, 2000 (invited speaker).

126. Midwest Differential Equations Conference, Moorhead, Minnesota, October 20–21, 2000 (plenary speaker).

127. Fargo Preconference Workshop on BVPs and Oscillation Theory of Differential Equations on Measure Chains, Fargo, North Dakota, October 19, 2000 (main speaker).

128. Third World Congress of Nonlinear Analysts, Catania, Sicily, Italy, July 19–26, 2000 (organizer of a Special Session on "Time Scales", jointly with Ondřej Došlý).

129. Special Session on "Differential Inequalities and Applications" at the AMS Meeting #953 (2000 Spring Central Section Meeting), Notre Dame, Indiana, April 7–9, 2000 (invited speaker).

130. San Diego Symposium on Asymptotics and Applied Analysis, San Diego, California, January 10–14, 2000 (invited speaker).

131. ICDEA2K, Fifth International Conference on Difference Equations and Applications, Temuco, Chile, January 3–7, 2000 (invited speaker).

132. Southern California Matrix Conference, San Diego, California, November 6, 1999 (invited speaker).

133. Colloquium for Humboldtians from Illinois, Indiana, Iowa, Missouri, Chicago, Illinois (Palmer House Hilton & University of Chicago Campus), October 1–3, 1999.

134. The Third International Conference on Dynamic Systems and Applications, Atlanta, Georgia, May 26–29, 1999 (invited speaker).

135. Fourth Mississippi State Conference on Differential Equations and Computational Simulations, Mississippi State University, Starkville, Mississippi, May 21–22, 1999 (invited speaker).

136. Joint Mathematics Meetings, San Antonio, Texas, January 13–16, 1999, Special Session on "Discrete Models and Difference Equations" (invited speaker).

137. Centennial Celebration, Department of Mathematics and Statistics, University of Nebraska–Lincoln, Lincoln, Nebraska, May 14–16, 1998 (invited speaker).

138. Joint Mathematics Meetings, Baltimore, Maryland, January 7–10, 1998, Special Session on "Difference Equations and Applications" (invited speaker).

139. Special Session on "Finite Differences and Functional Equations" at the AMS Meeting #928, Albuquerque, New Mexico, November 8–9, 1997 (invited speaker).

140. Equadiff 9, Brno, Czech Republic, August 25–29, 1997 (invited speaker).

141. Seventh Colloquium on Differential Equations, Plovdiv, Bulgaria, August 1996 (invited speaker).

142. Second World Congress of Nonlinear Analysts, Athens, Greece, July 10–17, 1996 (invited speaker).

143. International Workshop on Difference and Differential Inequalities, Tübitak–Marmara Research Center, Gebze, Turkey, July 3–7, 1996 (main speaker).

144. AMS Meeting, Baton Rouge, Louisiana, March 1996 (invited speaker).

145. General Inequalities 7, Oberwolfach, Germany, November 1995 (invited speaker).

146. Herbsttagung Analysis und Zahlentheorie, Nago, Italy, September 25–29, 1995 (invited speaker).

147. DMV Jahrestagung, Ulm, September 18–22, 1995 (invited speaker).

148. Second International Conference on Difference Equations and Applications, Veszprém, Hungary, August 7–11, 1995 (invited speaker).

149. Joint Mathematics Meetings, San Francisco, California, January 4–7, 1995, Special Session on "Difference Equations: Theory and Applications" (invited speaker).

150. Herbsttagung Analysis und Zahlentheorie, Colfosco, Italy, September 26–30, 1994 (invited speaker).

151. First International Conference on Difference Equations and Applications, San Antonio, Texas, May 25–28, 1994 (invited speaker).

152. Studentenkonferenz Mathematik, Humboldt Universität, Berlin, October 9–10, 1993 (invited speaker).

153. Herbsttagung Analysis und Zahlentheorie, Colfosco, Italy, September 27 – October 1, 1993 (invited speaker).

## 4.2 Colloquium Talks

1. University of Alabama, Huntsville, Alabama, April 12, 2019 (Time Scales).

2. San Diego State University, San Diego, California, November 25, 2014 (The Beverton–Holt Quantum Difference Equation).

3. University of Science and Technology Beijing, Beijing, China, July 31, 2014 (Dynamic Equations on Time Scales).

4. Missouri S&T, Physics Department, October 10, 2013 (An Introduction to Dynamic Equations on Time Scales and the Unification of the Laplace Transform and the Z-Transform).

5. Sun Yat-sen University, Guangzhou, China, May 30, 2013 (The Beverton–Holt Quantum Difference Equation).

6. South China Normal University, Guangzhou, China, May 27, 2013 (Unification of Laplace Transform and Z-transform).

7. Guangdong University of Education, Guangzhou, China, May 27, 2013 (Unification of Continuous and Discrete Calculus).

8. Guangzhou University, Guangzhou, China, May 24, 2013 (An Introduction to Dynamic Equations on Time Scales).

9. Sun Yat-sen University, Guangzhou, China, May 20, 2013 (Dynamic Equations on Time Scales).

10. Northern Illinois University, DeKalb, Illinois, September 14, 2012 (Dynamic Risk Aversion and Risk Vulnerability).

11. Northern Illinois University, DeKalb, Illinois, September 13, 2012 (Dynamic Equations on Time Scales).

12. Universidade de Sao Paulo, Sao Carlos, Brazil, February 1, 2, 3, 2012 (short course on "Dynamic Equations on Time Scales").

13. Cankaya University, Ankara, Turkey, June 16, 2011 (Stochastic Dynamic Equations).

14. Atilim University, Ankara, Turkey, May 18, 2011 (Risk Aversion in the Continuous and the Discrete).

15. Middle East Technical University (Dynamical Systems Seminar), Ankara, Turkey, May 14, 2011 (Time Scales Ostrowski Inequalities).

16. Middle East Technical University (Institute of Applied Mathematics), Ankara, Turkey, April 22, 2011 (Dynamic Utility Functions).

17. Osmangazi University, Eskişehir, Turkey, August 7, 2009 (Introduction to Dynamic Equations on Time Scales).

18. University of Missouri–Kansas City, Kansas City, Missouri, April 17, 2009 (Kneser's Theorem in Quantum Calculus).

19. University of Nebraska–Lincoln, Lincoln, Nebraska, April 25, 2008 (Logistic Differential, Difference, and Dynamic Equations).

20. Dicle University, Diyarbakır, Turkey, July 12, 2007 (Dynamic Equations on Time Scales).

21. Universität Ulm, Ulm, Germany, June 5, 2007 (Logistic Differential, Difference, and Dynamic Equations).

22. San Diego State University, San Diego, California, May 3, 2007 (Logistic Differential, Difference, and Dynamic Equations).

23. Middle East Technical University (Ankara Seminar), Ankara, Turkey, May 27, 2006 (Unified Transform Methods on Time Scales).

24. Izmir University of Economics, Izmir, Turkey, May 23, 2006 (Unified Transform Methods on Time Scales).

25. Marshall University, Huntington, West Virginia, April 7, 2006 (Unified Transform Methods on Time Scales).

26. Katholische Universität Eichstätt, Eichstätt, Germany, December 21, 2005 (The Lapace Transform for Dynamic Equations on Time Scales).

27. University of New South Wales, Sydney, Australia, May 25, 2004 (Dynamic Equations on Time Scales).

28. Portland State University, Portland, Oregon, March 12, 2004 (Dynamic Equations on Time Scales).

29. Truman State University, Kirksville, Missouri, February 10, 2004 (Dynamic Equations on Time Scales).

30. University of Nebraska–Lincoln, Lincoln, Nebraska, September 25, 2003 (Oscillation Criteria for First Order Delay Dynamic Equations).

31. Universität Ulm (Analysis Seminar), Ulm, Germany, June 23, 2003 (Oscillation of Delay Dynamic Equations).

32. San Diego State University, San Diego, California, March 27, 2003 (Laplace Transform and Z-Transform — Unified).

33. Atilim University, Ankara, Turkey, January 8, 2003 (The Laplace Transform for Dynamic Equations).

34. Middle East Technical University (Dynamic Equations Day), Ankara, Turkey, June 11, 2002 (The Regressive Vector Space).

35. Atilim University (Ankara Seminar), Ankara, Turkey, June 1, 2002 (Some Dynamic Equations).

36. Universität Ulm, Ulm, Germany, May 14, 2002 (Einige dynamische Gleichungen).

37. Auburn University, Auburn, Alabama, December 7, 2001 (Continuous and Discrete Oscillation).

38. Universität Ulm, Ulm, Germany, July 2, 2001 (Laplace und Z-Transformation).

39. Georgia Southern University, Statesboro, Georgia, March 19, 2001 (Laplace Transform and Z-Transform: Unification and Extension).

40. Florida Institute of Technology, Melbourne, Florida, February 22, 2001 (Laplace Transform and Z-Transform: Unification and Extension).

41. University of Missouri–Columbia (PDE Seminar), Columbia, Missouri, November 2, 2000 (Laplace Transform for Time Scales).

42. Masaryk University Brno, Brno, Czech Republic, June 21, 2000 (Linear Dynamic Equations on Time Scales).

43. Universität Ulm (Analysis Seminar), Ulm, Germany, June 5, 2000 (Lineare dynamische Systeme auf Time Scales).

44. Illinois Wesleyan University, Normal, Illinois, April 28, 2000 (Dynamic Equations and Inequalities on Time Scales).

45. University of Nebraska–Omaha, Omaha, Nebraska, March 30, 2000 (Dynamic Equations on Time Scales).

46. San Diego State University, San Diego, California, June 17, 1999 (The Discrete Prüfer Transformation).

47. San Diego State University, San Diego, California, October 9, 1998 (Asymptotic Behavior of Discretized Eigenvalue Problems).

48. University of Nebraska–Omaha, Omaha, Nebraska, February 27, 1998 (Quadratic Functionals in Discrete Variational Analysis).

49. Boise State University, Boise, Idaho, February 23, 1998 (Quadratic Functionals in Discrete Variational Analysis).

50. University of Missouri–Rolla, Rolla, Missouri, February 9, 1998 (Quadratic Functionals in Discrete Variational Analysis).

51. University of Missouri–Columbia, Columbia, Missouri, November 14, 1997 (Quadratic Functionals on Time Scales).

52. San Diego State University, San Diego, California, September 19, 1997 (Time Scales — A Unified Approach to Continuous and Discrete Calculus).

53. Martin-Luther-Universität Halle–Wittenberg, Halle, Germany, November 28, 1996 (Diskrete Sturmsche Theorie).

54. Poznan University of Technology, Poznan, Poland, September 25, 1996 (Discrete Sturmian Theory).

55. Universität Ulm (Analysis Seminar), Ulm, Germany, June 10, 1996 (Diskrete Sturmsche Theorie).

56. Mississippi State University, Starkville, Mississippi, April 4, 1996 (Discrete Sturmian Theory).

57. Masaryk University Brno, Brno, Czech Republic, March 11, 1996 (Discrete Sturmian Theory).

58. San Diego State University, San Diego, California, August 30, 1995 (An Analog of the Sturm–Liouville Theory for Difference Equations).

59. Masaryk University Brno, Brno, Czech Republic, November 21, 1994 (Disconjugacy of Symplectic Systems).

60. San Diego State University, San Diego, California, September 1, 1993 (An Oscillation Theorem for Sturm–Liouville Difference Equations with Separated Boundary Conditions).

## 4.3 Seminar Talks

1. The Black–Scholes equation, Actuarial Science Club, Missouri S&T, May 1, 2015.

2. Best teaching practices, Graduate Teaching Seminar, Missouri S&T, October 29, 2014.

3. Discrete inverse Sturm–Liouville problems, Time Scales Seminar, Missouri S&T, Feburary 12, 2014.

4. Best teaching practices, Teaching Seminar, Missouri S&T, November 18, 2013.

5. All you need to know to get ready to do research in time scales calculus, MAA student seminar, Missouri S&T, October 23, 2009.

6. $q$-difference equations, Student Paper Competition, Missouri S&T, April 25, 2009.

7. Dynamic risk vulnerability, Economics Seminar, Missouri S&T, May 15, 2008.

8. Dynamic risk aversion and risk vulnerability, Economics Seminar, Missouri S&T, May 8, 2008.

9. Dynamic risk aversion (Part II), Analysis Seminar, Missouri S&T, April 16, 2008.

10. Dynamic risk aversion, Analysis Seminar, Missouri S&T, April 9, 2008.

11. Derivation and solution of the Black–Scholes equation, Financial Engineering Association, UMR, September 25, 2007.

12. Five most important concepts to start time scales research, Time Scales Seminar, UMR, September 19, 2007.

13. The Math 15 LEAD Program, Talk for UMSL Delegation visiting UMR, December 5, 2006.

14. The Cushing–Henson conjectures, Analysis Seminar, UMR, November 8, 2006.

15. LaTeX, vi-editor, unix, and time scales, Time Scales Seminar, UMR, November 2, 2006.

16. Research in mathematics, Global Research Seminar, UMR, October 26, 2006.

17. Fibonacci numbers and the tower of Hanoi, Math 1, UMR, October 12, 2006.

18. Running a successful collaborative Learning Center for your course, New Faculty Teaching Scholar Program, UMR, October 11, 2006.

19. First and second order forced dynamic equations, Time Scales Seminar, UMR, August 31, 2006.

20. The Math 15 LEAD Program, LEAD Program, UMR, August 29, 2006.

21. Teaching and research in mathematics, Intensive English Program Seminar, UMR, April 25, 2006.

22. Oscillation of delay difference equations, Time Scales Seminar, UMR, February 7, 2006.

23. Case studies for today's classroom, "Popson's dilemma", Graduate Student Seminar, UMR, February 6, 2006.

24. Oscillation of delay differential equations, Time Scales Seminar, UMR, February 2, 2006.

25. Running a successful collaborative Learning Center for your course, New Faculty Teaching Scholar Program, UMR, November 9, 2005.

26. Oscillation and nonoscillation of forced second order dynamic equations, Analysis Seminar, UMR, October 19, 2005.

27. Using binomial trees to price options, MAA Student Seminar, UMR, October 12, 2005.

28. Case studies for today's classroom, "Seeking points", Graduate Student Seminar, UMR, September 19, 2005.

29. Fibonacci numbers and the tower of Hanoi, State Math Team Practice, May 21, 2005.

30. Case studies for today's classroom, "The quicksand of problem four", Graduate Student Seminar, UMR, March 21, 2005.

31. What is one over four in quantum calculus?, Analysis Seminar, UMR, January 19, 2005.

32. Participant of the Faculty Panel Discussion during International Education Week, UMR, November 18, 2004.

33. An introduction to quantum calculus, MAA Student Seminar, UMR, November 10, 2004.

34. Oscillation results for $q$-difference equations, Analysis Seminar, UMR, September 22, 2004.

35. What's the derivative of $t^2$?, Mathematics and Statistics Undergraduate Party, UMR, April 6, 2004.

36. Taking derivatives differently, MAA Student Seminar, UMR, February 9, 2004.

37. Some oscillation criteria for first order dynamic equations, Analysis Seminar, UMR, September 10, 2003.

38. Taking derivatives differently, Graduate Student Seminar, UMR, January 29, 2003.

39. The regressive vector space, Analysis Seminar, UMR, October 1, 2002.

40. Formulas of Bendixson and Alekseev for difference equations, Analysis Seminar, FIT, February 26, 2002.

41. Discrete symplectic systems, Analysis Seminar, FIT, October 16, 2001.

42. First and second order linear dynamic equations on time scales, Graduate Student Seminar, FIT, September 20, 2001.

43. Laplace transform and Z-transform: Unification and extension, Analysis Seminar, UMR, January 30, 2001.

44. Some more characterizations of Moore–Penrose inverses and their applications, Statistics Seminar, UMR, October 24, 2000.

45. First and second order dynamic equations on time scales, Analysis Seminar, UMR, September 27, 2000.

46. Positivity of block tridiagonal matrics, Analysis Seminar, UMR, November 10, 1999.

47. The Prüfer transformation for time scales, Analysis Seminar, UMR, October 13, 1999.

48. The discrete Prüfer transformation, Analysis Seminar, UMR, September 29, 1999.

49. Discrete symplectic and trigonometric systems, Analysis Seminar, UMR, February 3, 1999.

50. Some introductory remarks on Lyapunov inequalities for time scales, Analysis Seminar, UMR, December 2, 1998.

51. Asymptotic behavior of discretized eigenvalue problems, Analysis Seminar, UMR, October 14, 1998.

52. An introduction to time scales, Analysis Seminar, UMR, September 2, 1998.

## 4.4 Coauthors

1. Nemat Abazari (Mohaghegh Ardabili University, Iran).
2. Saïd Abbas (University of Saïda, Algeria).
3. Murat Adivar (Izmir University of Economics, Turkey).
4. Ghasem Afrouzi (University of Mazandaran, Iran).
5. Ravi Agarwal (Texas A&M University, USA).
6. Dov Aharonov (Technion, Israel).
7. Calvin Ahlbrandt (University of Missouri–Columbia, USA).
8. Faysal Akin (Dicle University, Turkey).
9. Elvan Akin-Bohner (Missouri S&T, USA).
10. Rasheed Al-Salih (University of Sumer, Iraq).
11. Matloob Anwar (National University of Sciences and Technology, Pakistan).
12. Serkan Araci (Hasan Kalyoncu University, Turkey).
13. Josipa Barić (University of Split, Croatia).
14. Alexandr Boĭchuk (National Academy of Sciences, Ukraine).
15. Miron Bekker (University of Pittsburgh, USA).
16. Sidi M. A. Bekkouche (University of Thlemcen, Algeria).
17. Tayeb Benouaz (University of Thlemcen, Algeria).

18. Li Bi (North East Normal University, China).

19. Rabia Bibi (National University of Sciences and Technology, Pakistan).

20. Sigrun Bodine (University of Puget Sound, USA).

21. Anastasiia Bratochkina (Kiev National University, Ukraine).

22. José Castillo (San Diego State University, USA).

23. Shaozhu Chen (Shandong University at Weihai, China).

24. Wing-Sum Cheung (University of Hong Kong, Hong Kong).

25. Rotchana Chieochan (Khon Kaen University, Thailand).

26. Abdelhak Chikhaoui (University of Thlemcen, Algeria).

27. Steven Clark (Missouri S&T, USA).

28. John Davis (Baylor University, USA).

29. Smaïl Djebali (E.N.S. Algiers, Algeria).

30. Alexander Domoshnitsky (The College of Judea and Samaria, Israel).

31. Ondřej Došlý (Masaryk University Brno, Czech Republic).

32. Oktay Duman (TOBB University, Turkey).

33. Uri Elias (Technion, Israel).

34. Paul Eloe (University of Dayton, USA).

35. Lynn Erbe (University of Nebraska–Lincoln, USA).

36. Meng Fan (North East Normal University, China).

37. Márcia Federson (Universidade de São Paulo, Brazil).

38. Rui Ferreira (Lusophone University, Portugal).

39. Armengol Gasull (Autonomous University Barcelona, Spain).

40. Rahman Gauhar (International Islamic University Islamabad, Pakistan).

41. Greg Gelles (Missouri S&T, USA).

42. Atanaska Georgieva (University of Plovdiv, Bulgaria).

43. Mathias Göggel (Missouri S&T, USA).

44. Yakov Goltser (The College of Judea and Samaria, Israel).

45. Said Grace (University of Cairo, Egypt).

46. Meihong Guan (University of Science and Technology Beijing, China).

47. Gusein Guseinov (Atılım University, Turkey).

48. Taher Hassan (Mansoura University, Egypt).

49. Julius Heim (Missouri S&T, USA).

50. Alexander N. Herega (Odessa State Academy, Ukraine).

51. Roger Hering (University of Missouri–Rolla, USA).

52. Roman Hilscher (Masaryk University Brno, Czech Republic).

53. Snezhana Hristova (Plovdiv University, Bulgaria).

54. Thomas Hudson (University of Missouri–Rolla, USA).

55. Stefen Hui (San Diego State University, USA).

56. Başak Karpuz (University of Kocatepe, Turkey).

57. Billur Kaymakçalan (Georgia Southern University, USA).

58. Werner Kratz (Universität Ulm, Germany).

59. V. Lakshimkantham (Florida Institute of Technology, USA).

60. Fatiha Lassouani (University of Thlemcen, Algeria).

61. Tong-Xing Li (Shandong University, China).

62. Wan-Tong Li (Lanzhou University, China).

63. Xiaodi Li (Shandong Normal University, China).

64. Kumari Liou (Indian Institute of Technology, India).

65. Ailian Liu (Shandong Economic University, China).

66. Hua Luo (Northwestern Normal University, China).

67. Donald Lutz (San Diego State University, USA).

68. Freddy H. Marin Sánchez, Universidad EAFIT, Columbia).

69. Anatoliĭ Andreevich Martynyuk (National Academy of Sciences, Ukraine).

70. Thomas Matthews (Missouri S&T, USA).

71. Jaqueline Godoy Mesquita (Universidade de São Paulo, Brazil).

72. Toufik Moussaoui (E.N.S. Algiers, Algeria).

73. Shahid Mubeen (University of Sargodha, Pakistan).

74. Kottakkaran Soopy Nisar (Prince Sattam bin Abdulaziz University, Saudi Arabia).

75. Özkan Öcalan (University of Kocatepe, Turkey).

76. Donal O'Regan (National University of Ireland, Ireland).

77. Josip Pečarić (University of Zagreb, Croatia).

78. Allan Peterson (University of Nebraska–Lincoln, USA).

79. Sandra Pinelas (Academia Militar, Porgural).

80. Pavel Řehák (Masaryk University Brno, Czech Republic).

81. Jerry Ridenhour (Utah State University, USA).

82. Stefania Rodriguez (Universidad EAFIT, Columbia).

83. Samir Saker (Mansoura University, Egypt).

84. Suman Sanyal (University of Missouri–Rolla, USA).

85. Alireza Sedaghatdoost (Mohaghegh Ardabili University, Iran).

86. Srinivasan Selvarangam (University of Madras, India).

87. Veli Shakhmurov (Istanbul University, Turkey).

88. José Manuel Silva Ferreira (Technical University of Lisbon, Portugal).

89. Vadrevu Sree Hari Rao (Jawaharlal Nehru Technical University, India).

90. Olexander Stanzhits'kiĭ (Kiev National University, Ukraine).

91. Kremena Stefanova (Plovdiv University, Bulgaria).

92. Stevo Stević (Serbian Academy of Sciences, Serbia).

93. Nasrin Sultana (Missouri S&T, USA).

94. Shurong Sun (University of Jinan, China).

95. Shuhong Tang (Weifang University, China).

96. Christopher Tisdell (University of New South Wales, Australia).

97. Delfim F. M. Torres (University of Aveiro, Portugal).

98. Adnan Tuna (University of Niğde, Turkey).

99. Mehmet Ünal (Bahçeşehir University, Turkey).

100. Claudia Valls (University of Lisbon, Portugal).

101. Sanja Varošanec (University of Zagreb, Croatia).

102. Tammy Voepel (Southern Illinois University, USA).

103. Hristo Voulov (University of Missouri, USA).

104. Howard Warth (University of Missouri–Rolla, USA).

105. Nick Wintz (Lindenwood University, USA).

106. Patricia Wong (Nanyang Technological University, Singapore).

107. Ağacik Zafer (Middle East Technical University, Turkey).

108. Cheng Hui Zhang (Shandong University, China).

109. Jimin Zhang (North East Normal University, China).

110. Liancun Zheng (University of Science and Technology Beijing, China).

111. Yao Zheng (Renmin University of China, China).

## 4.5 Invited Speakers

1. Professor Ioan-Lucian Popa, University of Alba Iulia, Alba Iulia, Romania: Colloquium Talk at Missouri S&T on December 7, 2018.

2. Professor Jaqueline Mesquita, UNB, Brasilia, Brazil: Colloquium Talk at Missouri S&T on January 26, 2018.

3. Professor Luciano Barbanti, UNESP, Ilha Solteira, Brazil: Colloquium Talk at Missouri S&T on March 15, 2016.

4. Professor Oleksandr Stanzhytskyi, Taras Chevchenko University, Kyiv, Ukraine: Colloquium Talk at Missouri S&T on December 7, 2012.

5. Professor Peter Kloeden, University of Frankfurt, Frankfurt, Germany: Colloquium Talk at Universität Ulm on January 18, 2011.

6. Professor Andreas Ruffing, Technical University Munich, Munich, Germany: Colloquium Talk at Universität Ulm on December 21, 2010.

7. Professor Hristo Voulov, University of Missouri, Kansas City, Missouri: Colloquium Talk at Missouri S&T on September 12, 2008.

8. Professor Werner Balser, University of Ulm, Ulm, Germany: Colloquium Talk at Missouri S&T on March 21, 2008.

9. Professor Liancun Zheng, University of Science and Technology Beijing, Beijing, China: Colloquium Talk at UMR on November 16, 2007.

10. Professor Mark Dunster, San Diego State University, San Diego, California: Colloquium Talk at UMR on October 19, 2007.

11. Professor Youssef Raffoul, University of Dayton, Dayton, Ohio: Colloquium Talk at UMR on October 12, 2007.

12. Professor Roman Hilscher, Masaryk University, Brno, Czech Republic: Colloquium Talk at UMR on August 31, 2007.

13. Professor Kamel Rekab, University of Missouri–Kansas City, Kansas City, Missouri: Colloquium Talk at UMR on April 27, 2007.

14. Professor Bonita Lawrence, Marshall University, Huntington, West Virginia: Colloquium Talk at UMR on October 13, 2006.

15. Professor Ioannis Stavroulakis, University of Ioannina, Ioannina, Greece: Colloquium Talk at UMR on January 20, 2006.

16. Professor Tony Zettl, Northern Illinois University, DeKalb, Illinois: Colloquium Talk at UMR on December 2, 2005.

17. Professor Richard DeVault, Northwestern State University Louisiana, Natchitoches, Louisiana: Colloquium Talk at UMR on October 28, 2005.

18. Professor Valery Gaiko, Belarus State University, Minsk, Belarus: Colloquium Talk at UMR on May 9, 2005.

19. Professor Lance Littlejohn, Utah State University, Logan, Utah: Colloquium Talk at UMR on May 6, 2005.

20. Professor Allan Peterson, University of Nebraska–Lincoln, Lincoln, Nebraska: Colloquium Talk at UMR on April 8, 2005.

21. Professor Marek Elzanowski, Portland State University, Portland, Oregon: Colloquium Talk at UMR on October 29, 2004.

22. Professor Mehmet Ünal, Bahçeşehir University, Istanbul, Turkey: Colloquium Talk at UMR on September 15, 2004.

23. Professor Andreas Ruffing, Technical University Munich, Munich, Germany: Colloquium Talk at UMR on April 9, 2004.

24. Professor Qin Sheng, University of Dayton, Dayton, Ohio: Colloquium Talk at UMR on March 22, 2004.

25. Professor Johnny Henderson, Baylor University, Waco, Texas: Colloquium Talk at UMR on March 5, 2004.

26. Professor Murat Adivar, Izmir University of Economics, Izmir, Turkey: Colloquium Talk at UMR on February 18, 2004.

27. Professor Lynn Erbe, University of Nebraska–Lincoln, Lincoln, Nebraska: Colloquium Talk at UMR on February 13, 2004.

28. Professor Donald Lutz, San Diego State University, San Diego, California: Colloquium Talk at UMR on November 21, 2003.

29. Professor Gary Sampson, Auburn University, Auburn, Alabama: Colloquium Talk at UMR on April 11, 2003.

30. Professor Werner Kratz, University of Ulm, Ulm, Germany: Colloquium Talk at UMR on November 8, 2002.

31. Professor Calvin Ahlbrandt, University of Missouri–Columbia, Columbia, Missouri: Colloquium Talk at UMR on November 6, 2002.

32. Professor Ondrej Došlý, Masaryk University, Brno, Czech Republic: Colloquium Talk at FIT on April 25, 2002.

33. Professor Werner Kratz, University of Ulm, Ulm, Germany: Colloquium Talk at FIT on September 27, 2001.

34. Professor Donald Lutz, San Diego State University, San Diego, California: Colloquium Talk at UMR on May 9, 2001.

35. Professor Ravi Agarwal, National University Singapore, Singapore: Colloquium Talk at UMR on December 6, 2000.

36. Professor Stefan Hilger, Catholic University Eichstätt, Eichstätt, Germany: Colloquium Talk at UMR on October 25, 2000.

37. Professor José Castillo, San Diego State University, San Diego, California: Colloquium Talk at UMR on October 5, 2000.

38. Professor Ravi Agarwal, National University Singapore, Singapore: Colloquium Talk at UMR on May 11, 2000.

39. Professor Saber Elaydi, Trinity University, San Antonio, Texas: Colloquium Talk at UMR on May 1, 2000.

40. Professor Billûr Kaymakçalan, Middle East Technical University, Ankara, Turkey: Colloquium Talk at UMR on March 1, 2000.

41. Professor Werner Kratz, University of Ulm, Ulm, Germany: Colloquium Talk at UMR on September 27, 1999.

42. Professor Ondrej Došlý, Masaryk University, Brno, Czech Republic: Colloquium Talk at UMR on May 12, 1999.

43. Professor Donald Lutz, San Diego State University, San Diego, California: Colloquium Talk at UMR on March 5, 1999.

44. Professor Paul Eloe, University of Dayton, Dayton, Ohio: Colloquium Talk at UMR on March 3, 1999.

45. Professor Allan Peterson, University of Nebraska–Lincoln, Lincoln, Nebraska: Colloquium Talk at UMR on September 27, 1998.

# Chapter 5

# Publication List

## 5.1 Theses

[1] M. Bohner. The brain state in a convex body neural model. Master's thesis, San Diego State University, 1992.

[2] M. Bohner. Ein Oszillationssatz für Sturm–Liouvillesche Eigenwertprobleme. Master's thesis, Universität Ulm, 1993.

[3] M. Bohner. *Zur Positivität diskreter quadratischer Funktionale.* PhD thesis, Universität Ulm, 1995. English Edition: On positivity of discrete quadratic functionals.

## 5.2 Books

[4] M. Bohner and A. Peterson. *Dynamic Equations on Time Scales: An Introduction with Applications*. Birkhäuser, Boston, 2001.

[5] M. Bohner and A. Peterson. *Advances in Dynamic Equations on Time Scales*. Birkhäuser, Boston, 2003.

[6] R. Agarwal, M. Bohner, and W.-T. Li. *Nonoscillation and Oscillation Theory for Functional Differential Equations*. Monographs and Textbooks in Pure and Applied Mathematics. Marcel Dekker, Inc., 2004.

[7] R. P. Agarwal, M. Bohner, S. R. Grace, and D. O'Regan. *Discrete Oscillation Theory*. Hindawi Publishing Corporation, 2005.

[8] M. Bohner, Z. Došlá, G. Ladas, M. Ünal, and A. Zafer, editors. *Difference Equations and Applications*. Bahçeşehir University Publications, Istanbul, Turkey, 2009. Proceedings of the Fourteenth International Conference on Difference Equations and Applications held in Istanbul, Turkey, July 21–25, 2008.

[9] J. Barić, R. Bibi, M. Bohner, A. Nosheen, and J. Pečarić. *Jensen inequalities on time scales*, volume 9 of *Monographs in Inequalities*. ELEMENT, Zagreb, 2015. Theory and applications.

[10] M. Bohner, Y. Ding, and O. Došlý, editors. *Difference Equations, Discrete Dynamical Systems and Applications*, volume 150. Springer, Cham, Switzerland, 2015. Proceedings of the Twentieth International Conference on Difference Equations and Applications held in Wuhan, China, July 21–25, 2014.

[11] M. Bohner and S. Georgiev. *Multivariable Dynamic Calculus on Time Scales*. Springer, 2016.

[12] M. Bohner, S. Siegmund, R. Šimon Hilscher, and P. Stehlík, editors. *Difference Equations, Discrete Dynamical Systems and Applications*, volume 312. Springer, Cham, Switzerland, 2020. Proceedings of the Twentyfourth International Conference on Difference Equations and Applications held in Dresden, Germany, May 21–25, 2018.

[13] S. Baigent, M. Bohner, and S. Elaydi, editors. *Progress on Difference Equations and Discrete Dynamical Systems*, volume 341. Springer, Cham, Switzerland, 2020. Proceedings of the Twentyfifth International Conference on Difference Equations and Applications held in London, UK, June 24–28, 2019.

[14] R. Agarwal, M. Bohner, and A. Özbekler. *Liapunov Inequalities and Applications*. Springer, 2021.

## 5.3 Special Issues

[15] R. P. Agarwal and M. Bohner, editors. *Continuous and Discrete Hamiltonian Systems, special issue of Dynam. Systems Appl.*, volume 8 (3-4), 1999.

[16] R. P. Agarwal, M. Bohner, and D. O'Regan, editors. *Dynamic Equations on Time Scales, special issue of J. Comput. Appl. Math.*, volume 141 (1-2), 2002.

[17] M. Bohner and J. Henderson, editors. *Special issue dedicated to Professor Peterson's* 60*th birthday, J. Differ. Equations Appl.*, volume 8 (9), 2002. Part I.

[18] M. Bohner and J. Henderson, editors. *Special issue dedicated to Professor Peterson's* 60*th birthday, J. Differ. Equations Appl.*, volume 8 (10), 2002. Part II.

[19] M. Bohner and J. Henderson, editors. *Special issue dedicated to Professor Peterson's* 60*th birthday, J. Differ. Equations Appl.*, volume 8 (11), 2002. Part III.

[20] M. Bohner and J. Henderson, editors. *Special issue dedicated to Professor Peterson's* 60*th birthday, J. Differ. Equations Appl.*, volume 9 (1), 2003. Part IV.

[21] M. Bohner and B. Kaymakçalan, editors. *Dynamic Equations on Time Scales, special issue of Dynam. Systems Appl.*, volume 12 (1-2), 2003.

[22] R. P. Agarwal, M. Bohner, and D. O'Regan, editors. *Advances in Difference Equations IV, special issue of Comput. Math. Applic.*, volume 45 (6-9), 2003.

[23] M. Bohner, J. Hoffacker, and B. Kaymakçalan, editors. *Dynamic Equations on Time Scales, special issue of Dynam. Systems Appl.*, volume 13, 2004.

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[29] M. Benchohra, M. Bohner, M. El-Kady, and J. Liang, editors. *Mathematical Engineering and Control with Applications, special issue of J. Appl. Math.*, volume 2013, 2013.

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[33] M. Bohner, J. Diblik, and V. Vasilyev, editors. *Differential and Difference Equations and Symmetry, special issue of Symmetry*, 2020.

[34] J. Mesquita, M. Bohner, C. Lizama, and H. Matsunaga, editors. *Difference, Differential and Dynamic Equations, special issue of Int. J. Dyn. Syst. Differ. Equ.*, volume 11, 2021.

[35] S. Araci, M. Bohner, R. Corcino, and S. Purohit, editors. *p-Adic Analysis and q-Calculus with their Applications, special issue of Axioms*, 2021.

## 5.4 Surveys

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[37] M. Bohner and A. Peterson. A survey of exponential functions on time scales. *Cubo Mat. Educ.*, 3(2):285–301, 2001.

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## 5.5 Book Reviews, Dedications

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## 5.6 Chapters in Books

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## 5.7 Refereed Conference Proceedings

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*Proceedings of the First International Conference on Difference Equations*, pages 65–77, San Antonio, 1994. Gordon and Breach.

[56] M. Bohner. Inhomogeneous discrete variational problems. In S. Elaydi, I. Győri, and G. Ladas, editors, *Conference Proceedings of the Second International Conference on Difference Equations (Veszprém, 1995)*, pages 89–97, Amsterdam, 1997. Gordon and Breach.

[57] M. Bohner. Positive definiteness of discrete quadratic functionals. In C. Bandle, editor, *General Inequalities, 7 (Oberwolfach, 1995)*, volume 123 of *Internat. Ser. Numer. Math.*, pages 55–60, Basel, 1997. Birkhäuser.

[58] M. Bohner and O. Došlý. Trigonometric systems in oscillation theory of difference equations. In G. S. Ladde, N. G. Medhin, and M. Sambandham, editors, *Proceedings of Dynamic Systems and Applications (Atlanta, GA, 1999)*, volume 3, pages 99–104, Atlanta, 2001. Dynamic publishers.

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## 5.8 Journals

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