

CURRICULUM VITAE

BIXIANG WANG

Department of Mathematics

New Mexico Institute of Mining and Technology

801 Leroy Place

Socorro, NM 87801, USA

E-mail: bwang@nmt.edu

Web: <http://www.nmt.edu/~bwang>

Phone: (575) 835 5787

Fax: (575) 835 5366

EDUCATION

- 1994: **Ph.D.** in Mathematics, Lanzhou University, China.
- 2003: **M.S.** in Computer Science, McMaster University, Canada.
- 1991: **M.S.** in Mathematics, Lanzhou University, China.
- 1988: **B.S.** in Mathematics, Lanzhou University, China.

ACADEMIC POSITIONS

- 2015–present: **Professor**, New Mexico Institute of Mining & Technology.
- 2010–2015: **Associate Professor**, New Mexico Institute of Mining & Technology.
- 2005–2010: **Assistant Professor**, New Mexico Institute of Mining & Technology.
- 2003–2005: **Visiting Assistant Professor**, University of Kansas, USA.
- 2001–2003: **Teaching Assistant**, McMaster University, Canada.
- 1999–2000: **Visiting Assistant Professor**, Brigham Young University, USA.
- 1998–1999: **Postdoctor**, Brigham Young University, USA.
- July 1998: **Visiting Research Fellow**, University of Cologne, Germany.
- 1997–1998: **Research Fellow**, Universidad Complutense de Madrid, Spain.
- 1996–1997: **Assistant Professor**, Tsinghua University, China
- 1994–1996: **Postdoctor**, Beijing Institute of Appl. Phys. and Comp. Math., China.

AWARDS AND FELLOWSHIPS

- National Science Foundation, DMS-0703521, \$158,040 (2007-2011).
- Research Fellowship of German Academic Exchange Service (DAAD) (1998).
- Research Fellowship of Spanish Ministry of Education (1997-1999).
- Grants of Postdoctoral Foundation of China (1994-1996).
- Scholarship of Natural Sciences and Engineering Research Council of Canada (2002-2003).
- Ashbaugh Scholarship of McMaster University (2001-2002).

RESEARCH

Research Interests

AMS Subject Classifications: 35B40, 37H99, 60H15, 37L30, 35K55, 92C55, 58K55, 90C30.

- Partial Differential Equations.
- Deterministic and Random Dynamical Systems.
- Stochastic Analysis.
- Singular Perturbation Problems.
- Mathematical Biology.

Research Citations

- **2884** citations in Google Scholar.
- **1841** citations in MathSciNet, **114** publications.

Publications in Refereed Journals

1. Anhui Gu, Boling Guo and Bixiang Wang, Long term behavior of random Navier-Stokes equations driven by colored noise, *Discrete and Continuous Dynamical Systems, Series B*, doi: 10.3934/dcdsb.2020020
2. Bixiang Wang and Renhai Wang, Asymptotic behavior of stochastic Schrodinger lattice systems driven by nonlinear noise, *Stochastic Analysis and Applications*, <https://doi.org/10.1080/07362994.2019.1679646>

3. Renhai Wang, Yangrong Li and Bixiang Wang, Bi-spatial pullback attractors of fractional nonclassical diffusion equations on unbounded domains with (p,q)-growth nonlinearities, *Applied Mathematics and Optimization*, doi:10.1007/s00245-019-09650-6
4. Renhai Wang and Bixiang Wang, Random dynamics of lattice wave equations driven by infinite-dimensional nonlinear noise, *Discrete and Continuous Dynamical Systems, Series B*, doi: 10.3934/dcdsb.2020019
5. Renhai Wang, Lin Shi and Bixiang Wang, Asymptotic behavior of fractional nonclassical diffusion equations driven by nonlinear colored noise on \mathbb{R}^N , *Nonlinearity*, **32** (2019), 4524-4556.
6. Bixiang Wang, Dynamics of fractional stochastic reaction-diffusion equations on unbounded domains driven by nonlinear noise, *Journal of Differential Equations*, **268** (2019), 1-59.
7. Dingshi Li, Bixiang Wang and Xiaohu Wang, Random dynamics of fractional stochastic reaction-diffusion equations on \mathbb{R}^n without uniqueness, *Journal of Mathematical Physics*, **60** (2019), 072704, 1-21.
8. Bixiang Wang, Dynamics of stochastic reaction-diffusion lattice systems driven by nonlinear noise, *Journal of Mathematical Analysis and Applications*, **477** (2019), 104-132.
9. Lin Shi, Renhai Wang, Kening Lu and Bixiang Wang, Asymptotic behavior of stochastic FitzHugh-Nagumo systems on unbounded thin domains, *Journal of Differential Equations*, **267** (2019), 4373-4409.
10. Jun Shen, Kening Lu and Bixiang Wang, Convergence and center manifolds for differential equations driven by colored noise, *Discrete and Continuous Dynamical Systems, Series A*, **39** (2019), 4797-4840.
11. Renhai Wang and Bixiang Wang, Asymptotic behavior of non-autonomous fractional stochastic p-Laplacian equations, *Computers and Mathematics with Applications*, **78** (2019), 3527-3543.
12. Renhai Wang, Yangrong Li and Bixiang Wang, Random dynamics of fractional nonclassical diffusion equations driven by colored noise, *Discrete and Continuous Dynamical Systems, Series A*, **39** (2019), 4091-4126.
13. Dingshi Li, Kening Lu, Bixiang Wang and Xiaohu Wang, Limiting dynamics for non-autonomous stochastic retarded reaction-diffusion equations on thin domains, *Discrete and Continuous Dynamical Systems, Series A*, **39** (2019), 3717-3747.
14. Bixiang Wang, Weak Pullback Attractors for Stochastic Navier-Stokes Equations with Nonlinear Diffusion Terms, *Proceedings of the American Mathematical Society*, **147** (2019), 1627-1638.
15. Bixiang Wang, Weak pullback attractors for mean random dynamical systems in Bochner spaces, *Journal of Dynamics and Differential Equations*, **31** (2019), 2177-2204.
16. Anhui Gu and Bixiang Wang, Random attractors of FitzHugh-Nagumo systems driven by colored noise on unbounded domains, *Stochastics and Dynamics*, **19** (2019), No. 05, 1950035.

17. Jun Shen, Junyilang Zhao, Kening Lu and Bixiang Wang, The Wong-Zakai approximations of invariant manifolds and foliations for stochastic evolution equations, *Journal of Differential Equations*, **266** (2019), 4568-4623.
18. Kening Lu and Bixiang Wang, Wong-Zakai approximations and long term behavior of stochastic partial differential equations, *Journal of Dynamics and Differential Equations*, **31** (2019), 1341-1371.
19. Anhui Gu, Kening Lu and Bixiang Wang, Asymptotic behavior of random Navier-Stokes equations driven by Wong-Zakai approximations, *Discrete and Continuous Dynamical Systems, Series A*, **39** (2019), 185-218
20. Yadong Shang, Jianjun Paul Tian and Bixiang Wang, Asymptotic behavior of the stochastic Keller-Segel equations, *Discrete and Continuous Dynamical Systems, Series B*, **24** (2019), 1367-1391.
21. Hong Lu, Jiangang Qi, Bixiang Wang and Mingji Zhang, Random attractors for non-autonomous fractional stochastic parabolic equations on unbounded domains, *Discrete and Continuous Dynamical Systems, Series A*, **39** (2019), 683-706.
22. Anhui Gu, Dingshi Li, Bixiang Wang and Han Yang, Regularity of random attractors for fractional stochastic reaction-diffusion equations on \mathbb{R}^n , *Journal of Differential Equations*, **264** (2018), 7094-7137.
23. Anhui Gu and Bixiang Wang, Asymptotic behavior of random FitzHugh-Nagumo systems driven by colored noise, *Discrete and Continuous Dynamical Systems, Series B*, **23** (2018), 1689-1720.
24. Xiaohu Wang, Kening Lu and Bixiang Wang, Wong-Zakai approximations and attractors for stochastic reaction-diffusion equations on unbounded domains, *Journal of Differential Equations*, **264** (2018), 378-424.
25. Dingshi Li, Kening Lu, Bixiang Wang and Xiaohu Wang, Limiting behavior of dynamics for stochastic reaction-diffusion equations with additive noise on thin domains, *Discrete and Continuous Dynamical Systems, Series A*, **38** (2018), 187-208.
26. Bixiang Wang, Asymptotic behavior of non-autonomous fractional stochastic reaction-diffusion equations, *Nonlinear Analysis TMA*, **158** (2017), 60-82.
27. Bixiang Wang, Multivalued non-autonomous random dynamical systems for wave equations without uniqueness, *Discrete and Continuous Dynamical Systems, Series B*, **22** (2017), 2011-2051.
28. Dingshi Li, Bixiang Wang and Xiaohu Wang, Limiting behavior of non-autonomous stochastic reaction-diffusion equations on thin domains, *Journal of Differential Equations*, **262** (2017), 1575-1602.
29. Xiaohu Wang, Kening Lu and Bixiang Wang, Exponential stability of non-autonomous stochastic delay lattice systems with multiplicative noise, *Journal of Dynamics and Differential Equations*, **28** (2016), 1309-1335.

30. Xiaohu Wang, Kening Lu and Bixiang Wang, Long term behavior of delay parabolic equations with additive noise and deterministic time dependent forcing, *SIAM Journal on Applied Dynamical Systems*, **14** (2015), 1018-1047.
31. Bixiang Wang, Stochastic bifurcation of pathwise random almost periodic and almost automorphic solutions for random dynamical systems, *Discrete and Continuous Dynamical Systems, Series A*, **35** (2015), 3745-3769.
32. Peter W. Bates, Kening Lu and Bixiang Wang, Attractors of non-autonomous stochastic lattice systems in weighted spaces, *Physica D*, **289** (2014), 32-50.
33. Bixiang Wang, Existence and upper semicontinuity of attractors for stochastic equations with deterministic non-autonomous terms, *Stochastics and Dynamics*, **14** (2014), No. 4, 1450009, 1-31.
34. Andrew Krause and Bixiang Wang, Pullback attractors of non-autonomous stochastic degenerate parabolic equations on unbounded domains, *J. Math. Anal. Appl.*, **417** (2014), 1018-1038.
35. Bixiang Wang, Existence, stability and bifurcation of random complete and periodic solutions of stochastic parabolic equations, *Nonlinear Analysis TMA*, **103** (2014), 9-25.
36. Bixiang Wang, Random attractors for non-autonomous stochastic wave equations with multiplicative noise, *Continuous and Discrete Dynamical Systems, Series A*, **34** (2014), 269-300.
37. Andrew Krause, Michael Lewis and Bixiang Wang, Dynamics of the non-autonomous stochastic p -Laplace equation driven by multiplicative noise, *Applied Mathematics and Computation*, **246** (2014), 365-376.
38. Bixiang Wang and Boling Guo, Asymptotic behavior of non-autonomous stochastic parabolic equations with nonlinear Laplacian principal part, *Electronic J. Differential Equations*, **2013** (2013), No. 191, 1-25.
39. Abiti Adili and Bixiang Wang, Random attractors for non-autonomous stochastic FitzHugh-Nagumo systems with multiplicative noise, *Continuous and Discrete Dynamical Systems, Supplement* (2013), 1-10.
40. Peter W. Bates, Kening Lu and Bixiang Wang, Tempered random attractors for parabolic equations in weighted spaces, *J. Math. Physics*, **54** (2013), 081505, 1-26.
41. Abiti Adili and Bixiang Wang, Random attractors for stochastic FitzHugh-Nagumo systems driven by deterministic non-autonomous forcing, *Continuous and Discrete Dynamical Systems Series B*, **18** (2013), 643-666.
42. Robert Jones and Bixiang Wang, Asymptotic behavior of a class of stochastic nonlinear wave equations with dispersive and dissipative terms, *Nonlinear Analysis, Real World Applications*, **14** (2013), 1308-1322.
43. Bixiang Wang, Sufficient and necessary criteria for existence of pullback attractors for non-compact random dynamical systems, *J. Differential Equations*, **253** (2012), 1544-1583.

44. Bixiang Wang, Periodic random attractors for stochastic Navier-Stokes equations on unbounded domains, *Electronic J. Differential Equations*, **2012** (2012), No. 59, 1-18.
45. Bixiang Wang, Almost periodic dynamics of perturbed infinite-dimensional dynamical systems, *Nonlinear Analysis TMA*, **74** (2011), 7252-7260.
46. Bixiang Wang, Asymptotic behavior of stochastic wave equations with critical exponents on \mathbb{R}^3 , *Transactions of Amer. Math. Soc.*, **363** (2011), 3639-3663.
47. Kasimir Gabert and Bixiang Wang, Non-autonomous attractors for singularly perturbed parabolic equations on \mathbb{R}^n , *Nonlinear Analysis TMA*, **73** (2010) 3336-3347.
48. Weishi Liu and Bixiang Wang, Poisson-Nernst-Planck Systems for Narrow Tubular-Like Membrane Channels, *J. Dynamics and Differential Equations*, **22** (2010), 413-437.
49. Bixiang Wang and Robert Jones, Asymptotic behavior of a class of non-autonomous degenerate parabolic equations, *Nonlinear Analysis TMA*, **72** (2010) 3887-3902.
50. Bixiang Wang and Xiaoling Gao, Random attractors for wave equations on unbounded domains, *Discrete and Continuous Dynamical Systems*, Supplement (2009), 800-809.
51. Bixiang Wang, Upper semicontinuity of random attractors for non-compact random dynamical systems, *Electronic J. Differential Equations*, **2009** (2009), No. 139, 1-18.
52. Bixiang Wang, Random attractors for the stochastic FitzHugh-Nagumo system on unbounded domains, *Nonlinear Analysis TMA*, **71** (2009), 2811-2828.
53. Bixiang Wang, Pullback attractors for the non-autonomous FitzHugh-Nagumo system on unbounded domains, *Nonlinear Analysis TMA*, **70** (2009), 3799-3815.
54. Bixiang Wang, Random attractors for the stochastic Benjamin-Bona-Mahony equation on unbounded domains, *J. Differential Equations*, **246** (2009), 2506-2537.
55. Bixiang Wang, Pullback attractors for non-autonomous Reaction-Diffusion equations on \mathbb{R}^n , *Frontiers of Mathematics in China*, **4** (2009), 563-583.
56. Peter W. Bates, Kening Lu and Bixiang Wang, Random attractors for stochastic Reaction-Diffusion equations on unbounded domains, *J. Differential Equations*, **246** (2009), 845-869.
57. Guglielmo Fucci, Bixiang Wang and Preeti Singh, Asymptotic behavior of the Newton-Boussinesq equation in a two-dimensional channel, *Nonlinear Analysis TMA*, **70** (2009), 2000-2013.
58. Bixiang Wang, Uniform attractors of non-autonomous discrete Reaction-Diffusion systems in weighted spaces, *International J. Bifurcation and Chaos*, **18** (2008), 695-716.
59. Bixiang Wang and Siyu Lin, Existence of global attractors for the three-dimensional Brinkman-Forchheimer equation, *Mathematical Methods in the Applied Sciences*, **31** (2008), 1479-1495.
60. Timothy Trujillo and Bixiang Wang, Continuity of strong solutions of the Reaction-Diffusion equation in initial data, *Nonlinear Analysis TMA*, **69** (2008), 2525-2532.

61. Bixiang Wang, Daniel W. Fussner and Chenggeng Bi, Existence of global attractors for the Benjamin-Bona-Mahony equation in unbounded domains, *J. Phys. A*, **40** (2007), 10491-10504.
62. Bixiang Wang, Dynamical behavior of the almost-periodic discrete FitzHugh-Nagumo systems, *International J. Bifurcation and Chaos*, **17** (2007), 1673-1685.
63. Bixiang Wang, Asymptotic behavior of non-autonomous lattice systems, *J. Math. Anal. Appl.*, **331** (2007), 121-136.
64. Weishi Liu and Bixiang Wang, Asymptotic behavior of the FitzHugh-Nagumo system, *International J. Evolution Equations*, **2** (2007), 129-163.
65. Bixiang Wang, Dynamics of systems on infinite lattices, *J. Differential Equations*, **221** (2006), 224-245.
66. Milena Stanislavova, Atanas Stefanov and Bixiang Wang, Asymptotic smoothing and attractors for the generalized Benjamin-Bona-Mahony equation on \mathbb{R}^3 , *J. Differential Equations*, **219** (2005), 451-483.
67. Erik Van Vleck and Bixiang Wang, Attractors for lattice FitzHugh-Nagumo systems, *Physica D*, **212** (2005), 317-336.
68. Kening Lu and Bixiang Wang, Upper semicontinuity of attractors for the Klein-Gordon-Schrodinger equation on unbounded domains, *International Journal of Bifurcation and Chaos*, **15** (2005), 157-168.
69. Christopher Kumar Anand, Tamas Terlaky and Bixiang Wang, Rapid and embeddable design method for magnetic resonance image reconstruction resampling kernels, *Optimization and Engineering*, **5** (2004), 485-502.
70. Bixiang Wang, Uniqueness of solutions for the Ginzburg-Landau model of superconductivity in three spatial dimensions, *J. Math. Anal. Appl.*, **266** (2002), 1-20.
71. Boling Guo and Bixiang Wang, Long time behavior of the solutions for the multidimensional Kolmogorov-Spiegel-Sivashinsky equation, *Acta Math. Sinica*, **18** (2002), 579-596.
72. Peter W. Bates, Kening Lu and Bixiang Wang, Attractors for lattice dynamical systems, *International Journal of Bifurcation and Chaos*, **11** (2001), 143-153.
73. Kening Lu and Bixiang Wang, Attractors for the Klein-Gordon-Schrodinger equation in unbounded domains, *J. Differential Equations*, **170** (2001), 281-316.
74. Anibal Rodriguez-Bernal and Bixiang Wang, Cauchy problem for the time dependent Ginzburg-Landau model of superconductivity, *Proceedings of Royal Society of Edinburgh*, **130A** (2000), 1383-1404.
75. Anibal Rodriguez-Bernal and Bixiang Wang, Attractors for partly dissipative reaction diffusion equations, *J. Math. Anal. Appl.*, **252** (2000), 790-803.
76. Wanli Yang and Bixiang Wang, On the question of global existence for the two-component reaction diffusion systems with the mixed boundary conditions, *Nonlinear Analysis TMA*, **39** (2000), 755-766.

77. Bixiang Wang, Attractors for reaction diffusion equations in unbounded domains, *Physica D*, **128** (1999), 41-52.
78. Bixiang Wang, Existence of time periodic solutions for the Ginzburg-Landau equations of superconductivity, *J. Math. Anal. Appl.*, **232** (1999), 394-412.
79. Bixiang Wang and Ning Su, Weak solutions of Ginzburg-Landau equations of superconductivity, *Appl. Math. Lett.*, **12** (1999), 115-118.
80. Bixiang Wang and Horst Lange, Attractors for the Klein-Gordon-Schrodinger equation, *J. Math. Phys.*, **40** (1999), 2445-2457.
81. Bixiang Wang and Ning Su, Existence of solutions for Ginzburg-Landau equations of superconductivity in three spatial dimensions, *Proceedings of Royal Society of Edinburgh*, **129A** (1999), 627-639.
82. Anibal Rodriguez-Bernal, Bixiang Wang and Robert Willie, Asymptotic behaviour of time-dependent Ginzburg-Landau equations of superconductivity, *Mathematical Methods in the Applied Sciences*, **22** (1999), 1647-1669.
83. Horst Lange and Bixiang Wang, Regularity of attractors for the Klein-Gordon-Schrodinger equation, *Mathematical Methods in the Applied Sciences*, **22** (1999), 1535-1554.
84. Anibal Rodriguez-Bernal and Bixiang Wang, Reduction of dimensions of approximate inertial manifolds by symmetry, *Bull. Australian Math. Soc.*, **60** (1999), 319-330.
85. Boling Guo and Bixiang Wang, Finite dimensional behaviour for the derivative Ginzburg-Landau equation in two spatial dimensions, *Physica D*, **89** (1995), 83-99.
86. Bixiang Wang and Boling Guo, Attractors for the Davey-Stewartson system on \mathbb{R}^2 , *J. Math. Physics*, **38** (1997), 2524-2534.
87. Bixiang Wang and Wanli Yang, Finite dimensional behaviour for the Benjamin-Bona-Mahony equation, *J. Phys. A*, **30** (1997), 4877-4885.
88. Bixiang Wang, Strong attractors for the Benjamin-Bona-Mahony equation, *Appl. Math. Lett.*, **10** (1997), 23-28.
89. Bixiang Wang, Attractors and approximate inertial manifolds for the generalized Benjamin-Bona-Mahony equation, *Mathematical Methods in the Applied Sciences*, **20** (1997), 189-203.
90. Hans G. Kaper, Bixiang Wang and Shouhong Wang, Determining nodes for the time dependent Ginzburg-Landau equations of superconductivity, *Discrete and Continuous Dynamical Systems*, **4** (1998), 205-224.
91. Bixiang Wang, Regularity of attractors for the Benjamin-Bona-Mahoney equation, *J. Phys. A*, **31** (1998), 7635-7645.
92. Bixiang Wang and Shouhong Wang, Gevrey class regularity for the time dependent Ginzburg-Landau equations of superconductivity, *Discrete and Continuous Dynamical Systems*, **4** (1998), 507-522.

93. Boling Guo and Bixiang Wang, Gevrey class regularity and approximate inertial manifolds for the Newton-Boussinesq equation, *Chinese Annals of Math.*, **19B** (1998), 179-188.
94. Boling Guo and Bixiang Wang, Gevrey regularity and approximate inertial manifolds for the derivative Ginzburg-Landau equation in two spatial dimensions, *Discrete and Continuous Dynamical Systems*, **2** (1996), 455-466.
95. Zhenchao Cao, Boling Guo and Bixiang Wang, Global existence theory for the two dimensional derivative Ginzburg-Landau equation, *Chinese Sci. Bull.*, **43** (1998), 393-395.
96. Boling Guo and Bixiang Wang, Exponential attractors for the generalized Ginzburg-Landau equation, *Acta Math. Sinica*, **16** (2000), 515-526.
97. Boling Guo and Bixiang Wang, Weak solutions to the two dimensional derivative Ginzburg-Landau equation, *Acta Math. Appl. Sinica*, **15** (1999), no. 1, 1-8.
98. Boling Guo and Bixiang Wang, Attractors for the long-short wave equations, *J. Partial Differential Equations*, **11** (1998), 361-383.
99. Boling Guo and Bixiang Wang, Upper semicontinuity of attractors for the reaction diffusion equation, *Acta Math. Scientia*, **18** (1998), 139-145.
100. Boling Guo and Bixiang Wang, Global existence for the Landau-Lifshitz equation, *Acta Math. Scientia*, **17** (1997), 429-436.
101. Bixiang Wang and Ke Shi, On nonlinear Galerkin approximation, *J. Computational Math.*, **17** (1997), 23-35.
102. Boling Guo and Bixiang Wang, Approximate inertial manifolds for the Newton-Boussinesq equation, *J. Partial Differential Equations*, **9** (1996), 237-250.
103. Boling Guo and Bixiang Wang, The global solution and its long time behavior for a class of generalized LS type equations, *Progress in Natural Science*, **6** (1996), 533-546.
104. Boling Guo and Bixiang Wang, Approximation to the global attractor of nonlinear Schrodinger equation, *Appl. Math. J. Chinese Univ.*, **11** (1996), 125-136.
105. Xianling Fan and Bixiang Wang, Error analysis of nonlinear Galerkin methods for Kuramoto-Sivashinsky equations, *Numer. Math. J. Chinese Univ.*, **5** (1996), 49-61.
106. Xianling Fan and Bixiang Wang, Conservative periodic solutions of prescribed average energy for singular Hamiltonian inclusions, *J. Math. Study*, **28** (1995), 1-10.
107. Boling Guo and Bixiang Wang, The global solution and its long time behaviour for a class of generalized LS type equations, *Advances in Math.(China)*, **24** (1995), 179-181.
108. Boling Guo and Bixiang Wang, Approximation to the global attractor of for the Landau-Lifshitz equation of the Ferromagnetic spin chain, *Beijing Math.*, **1** (1995), 164-174.

109. Xianling Fan and Bixiang Wang, Remarks on periodic solutions of prescribed energy for singular Hamiltonian systems, *Houston J. Math.*, **17** (1991), 385-393.

Book Chapters

110. Bixiang Wang, Periodic and almost periodic random inertial manifolds for non-autonomous stochastic equations, 189-208, *Continuous and Distributed Systems II: Theory and Applications*, Edited by V.A. Sadovnichiy and M.Z. Zgurovsky, Springer, 2015, arXiv:1409.3883.
111. Bixiang Wang, Long time behavior of lattice Schrodinger systems, in: *Advances in Mathematics Research*, Vol 9, Edited by A. R. Baswell, Nova Science Publisher, New York, 2009, 113-131.

PRESENTATIONS

Invited Conference Speaker

- Invariant measures of fractional stochastic parabolic equations, Conference on Partial Differential Equations and Numerical Analysis, Nanning, November 1-3, 2019.
- Approximations of pathwise dynamics of stochastic equations, Workshop on Infinite Dimensional Dynamical Systems, Chengdu, May 29 -June 2, 2017.
- Asymptotic behavior of non-autonomous stochastic p -Laplace equations, International Conference on Partial Differential Equations and Applications, Beijing, August 7-9, 2015.
- Periodic and almost periodic random inertial manifolds for non-autonomous stochastic equations, International Workshop on Stochastic Dynamics, Beijing, August 6-9, 2015.
- Asymptotic behavior of non-autonomous stochastic p -Laplace equations, Workshop on Infinite Dimensional Dynamical Systems, Sichuan University, June 17, 2013.
- Attractors of non-autonomous stochastic lattice systems, IMA Annual Program Year Workshop on Lattice and Nonlocal Dynamical Systems and Applications, Institute for Mathematics and its Applications, University of Minnesota, December 3-7, 2012.
- Bifurcation of non-autonomous stochastic equations, IMA Annual Program Year Workshop on Random Dynamical Systems, Institute for Mathematics and its Applications, University of Minnesota, October 22-26, 2012.
- Complete solutions and attractors for non-autonomous stochastic equations, Ninth AIMS International Conference on Dynamical Systems, Differential Equations and Applications, Orlando, July 1-5, 2012.
- Random attractors of a class of stochastic wave equations on unbounded domains, International Conference on Mathematics and Engineering, Hawaii, June 13-15, 2011.
- Random attractors for stochastic wave equations with critical exponents on unbounded domains, International Conference on Random Dynamical Systems, Tianjin, China, June 8-12, 2009.

- Random attractors for the stochastic FitzHugh-Nagumo system on unbounded domains, International Conference on Nonlinear and Stochastic Dynamics, Chengdu, China, June 1-5, 2009.
- Random attractors for the stochastic FitzHugh-Nagumo system on unbounded domains, Fifth World Congress of Nonlinear Analysts, Orlando, Florida, July 2-9, 2008.
- Random attractors for the stochastic FitzHugh-Nagumo system on unbounded domains, Seventh AIMS International Conference on Dynamical Systems, Differential Equations and Applications, Arlington, Texas, May 18-21, 2008.
- Attractors for the singularly perturbed FitzHugh-Nagumo system, 1019th AMS Meeting, Salt Lake City, October 7-8, 2006.

Contributed Conference Talks

- Reduction of the PNP system from three-dimensional domains to one-dimensional intervals, SIAM Conference on Applications of Dynamical Systems, Snowbird, Utah, May 28 - June 1, 2007.
- Asymptotic behavior of the FitzHugh-Nagumo system, SIAM Annual Meeting, Boston, July 10-12, 2006.
- Asymptotic behavior of the FitzHugh-Nagumo system, 9th New Mexico Analysis Seminar, University of New Mexico, Albuquerque, April 6-8, 2006.
- Asymptotic behavior of the FitzHugh-Nagumo system on the real line, international Workshop on Bifurcation Theory and Applications, Shanghai, May 23-26, 2004.

Invited Colloquium Speaker

- Weak mean-square random attractors of fractional stochastic parabolic equations, China University of Mining and Technology, Beijing, October 28, 2019.
- Weak mean-square random attractors of fractional stochastic parabolic equations, Beijing Institute of Applied Physics and Computational Mathematics, October 23, 2019.
- Invariant measures of fractional stochastic parabolic equations, Hohai University, Nanjing, October 18, 2019.
- Weak mean-square random attractors of fractional stochastic parabolic equations, Hohai University, Nanjing, October 17, 2019.
- Invariant measures of fractional stochastic parabolic equations, Shanghai Normal University, Shanghai, October 14, 2019.
- Weak mean-square random attractors of fractional stochastic parabolic equations, Shanghai Normal University, Shanghai, October 10, 2019.
- Invariant measures of fractional stochastic parabolic equations, Sichuan University, Chengdu, September 30, 2019.

- Dynamics of stochastic reaction-diffusion equations driven by nonlinear noise, South China University of Technology, Guangzhou, September 27, 2019.
- Dynamics of stochastic reaction-diffusion equations driven by nonlinear noise, Guangzhou University, Guangzhou, September 26, 2019.
- Weak mean-square random attractors of fractional stochastic parabolic equations, Southwest Jiaotong University, Chengdu, September 23, 2019.
- Random dynamics of stochastic parabolic equations driven by nonlinear noise, Shandong Technology and Business University, Yantai, June 01, 2019.
- Approximations of attractors and invariant manifolds of stochastic equations, Shandong University, Jinan, May 29, 2019.
- Invariant measures of stochastic parabolic equations, Shandong University, Jinan, May 27, 2019.
- Weak random attractors and invariant measures of stochastic parabolic equations, Shandong University, Jinan, May 25, 2019.
- Regularity of attractors of fractional stochastic equations, Beijing Institute of Applied Physics and Computational Mathematics, July 31, 2018.
- Random attractors of fractional stochastic parabolic equations, Southwest University, Chongqing, June 27, 2018,
- Asymptotic behavior of fractional stochastic parabolic equations, Sichuan Normal University, Chengdu, June 6, 2018.
- Asymptotic behavior of random differential equations, Beijing Institute of Applied Physics and Computational Mathematics, August 18, 2017.
- Attractors and invariant manifolds of random differential equations, Northwest Normal University, August 11, 2017.
- Pathwise random inertial manifolds for stochastic equations, Lanzhou University, August 10, 2017.
- Approximations of stochastic differential equations, Guangzhou University, June 5, 2017.
- Random inertial manifolds for stochastic equations, Southwest Jiaotong University, May 26, 2017.
- Attractors of non-autonomous stochastic lattice systems, Brigham Young University, October 29, 2013.
- Bifurcation of non-autonomous stochastic equations, University of South Florida, November 9, 2012.
- Random attractors for stochastic wave equations on unbounded domains, Beijing University, June 11, 2010.

- Existence and upper semi-continuity of random attractors for stochastic equations on unbounded domains, Beijing Institute of Applied Physics and Computational Mathematics, June 10, 2010.
- Asymptotic behavior of dissipative equations, University of Texas at Dallas, March 6, 2008.
- Solutions and long time behavior of evolution equations, University of Wisconsin–Whitewater, March 31, 2005.
- Asymptotic behavior of evolution equations, Ohio University, Feb. 28, 2005.
- Asymptotic behavior of the FitzHugh-Nagumo system on the real line, Academy of Armored Force Engineering, Beijing, Jul. 27, 2004.
- Asymptotic behavior of the FitzHugh-Nagumo system on the real line, Lanzhou University, Jun. 18, 2004.
- Attractors for evolution equations, Trent University, Feb. 27, 2003.
- Attractors for evolution equations, University of Texas-Pan American, Feb. 6, 2003.
- Attractors for differential evolution equations in unbounded domains, University of Utah, Sept. 28, 1998.

Invited Seminar Speaker

- Determining nodes for the Ginzburg-Landau equation, University of Kansas, April 6, 2005.
- Dynamics of the FitzHugh-Nagumo systems, University of Kansas, Oct. 6, 2004.
- Dynamics of the Klein-Gordon-Schrödinger System, University of Kansas, Apr. 14, 2004.
- Continuity properties for the Klein-Gordon-Schrödinger System, University of Kansas, Mar. 31, 2004.
- Attractors for evolution equations, part II, University of Kansas, Sept. 24, 2003.
- Attractors for evolution equations, part I, University of Kansas, Sept. 17, 2003.
- Regularity of attractors for weakly dissipative equations, Brigham Young University, 1999.
- Attractors for differential evolution equations in unbounded domains, Brigham Young University, 1998.

Talks at New Mexico Tech

- Bifurcation of one-dimensional stochastic equations, New Mexico Institute of Mining and Technology, April 26, 2019.
- Invariant measures of stochastic equations, New Mexico Institute of Mining and Technology, December 5, 2014.

- Pathwise random periodic and almost periodic solutions of stochastic equations, New Mexico Institute of Mining and Technology, November 22, 2013.
- Random attractors theory, New Mexico Institute of Mining and Technology, January 22, 2010.
- Non-autonomous dynamical systems, New Mexico Institute of Mining and Technology, November 21, 2008.
- Model reduction of ion flow through membrane channels, New Mexico Institute of Mining and Technology, November 9, 2007.
- Strong convergence, weak convergence and their applications, New Mexico Institute of Mining and Technology, December 1, 2006.
- Attractors for lattice dynamical systems, New Mexico Institute of Mining and Technology, September 23, 2005.
- Asymptotic behavior of evolution equations, New Mexico Tech., March 24, 2005.

SERVICE

Professional Service

- **Organization of Conferences and Seminars**
 - **Chair** of a special session, Fifth World Congress of Nonlinear Analysts, Orlando, Florida, July 2-9, 2008.
 - **Chair** (with Weishi Liu) of the special session: *Multi-scale Nonlinear Problems in Biological Systems: Experiments, Numerics and Theory*, SIAM Conference on Applications of Dynamical Systems, May 28-June 1, 2007, Snowbird, Utah.
 - **Member** of the Program Committee, The 2013 International Conference on Mathematics and Its Applications, August 18-21, 2013, Kuala Lumpur, Malaysia.
 - **Member** of the Program Committee, The Second International Conference on Mathematics and Computing, January 5-10, 2015, Haldia Institute of Technology, India.
 - **Organizer** of Computational and Applied Mathematics seminar, University of Kansas, 2004-2005.
- **Member of Editorial Board** of the journals
 - Abstract and Applied Analysis (2017–).
 - ISRN Mathematical Analysis (2010-2014).
 - Discrete Dynamics in Nature and Society (2014-2017).
 - International Journal of Analysis (2012).
 - International Journal of Applied Mathematics and Statistics (2005-2017).
 - Scientific Journals International, Mathematics and Statistics (2006-2013).

- **Reviewer** of the mathematical databases
 - Mathematical Reviews (2000-present).
 - Zentralblatt MATH (2007-present).
- **Reviewer** of grant proposals for Austrian Science Fund.
- **Referee** of the journals
 1. Journal of Differential Equations.
 2. Physica D: Nonlinear Phenomena.
 3. Physics Letters A.
 4. Nonlinearity.
 5. Stochastics.
 6. Statistics and Probability Letters.
 7. Stochastics and Dynamics.
 8. Calculus of Variations and Partial Differential Equations.
 9. Annales de l'Institut Henri Poincare Nonlinear Analysis.
 10. SIAM Journal on Applied Mathematics.
 11. Nonlinear Analysis: Real World Applications.
 12. Journal of Mathematical Analysis and Applications.
 13. Discrete and Continuous Dynamical Systems, Series A.
 14. Nonlinear Analysis: Theory, Methods & Applications.
 15. Journal of Mathematical Physics.
 16. Communications in Mathematical Sciences
 17. Journal of Difference Equations and Applications.
 18. Mathematical Methods in the Applied Sciences.
 19. Journal of Theoretical Biology.
 20. Discrete and Continuous Dynamical Systems, Series B.
 21. Advanced Nonlinear Studies.
 22. Journal of Applied Mathematics.
 23. Dynamical Systems, An International Journal.
 24. Applied Mathematics Letters.
 25. Journal of Physics A: Mathematical and Theoretical
 26. International Journal of Partial Differential Equations.
 27. Rocky Mountain Journal of Mathematics.
 28. Pacific Journal of Mathematics.
 29. Dynamics of Partial Differential Equations.
 30. Journal of the Franklin Institute.

31. Frontiers of Mathematics in China.
32. Acta Mathematica Sinica.
33. Applied Mathematics and Computation.
34. Abstract and Applied Analysis
35. Royal Society of Edinburgh Proceedings A.
36. AIMS Proceedings.
37. Applicable Analysis.
38. Electronic Journal of Differential Equations.
39. Soochow Journal of Mathematics.
40. Communications in Pure and Applied Analysis.
41. Journal of Mathematical Research with Applications.
42. Hiroshima Mathematical Journal.
43. International Journal of Bifurcation and Chaos.
44. Science China: Mathematics.
45. IEEE Transactions on Neural Networks and Learning Systems.
46. Far East Journal of Applied Mathematics.
47. International Journal of Computer Mathematics.
48. International Journal of Applied Mathematics and Statistics.
49. Taiwanese Journal of Mathematics.
50. Journal of Inequalities and Applications.
51. Acta Mathematica Applicatae Sinica.
52. British Journal of Mathematics & Computer Science.
53. Boundary Value Problems.
54. ISRN Mathematical Analysis.
55. African Diaspora Journal of Mathematics.
56. Scientific Journals International.
57. Proceedings of the Second International Conference on Mathematics and Computing.

Service at New Mexico Tech

Since joining New Mexico Tech in 2005, part of my contributions to the Department of Mathematics and the Institute is listed below:

- Member of Sabbatical Committee.
- Chair and member of Financial Aid and Scholarship Committee.
- Member of Hiring Committee for the EE Department.
- Judge of the New Mexico Science and Engineering Fair.

- Member of Hiring Committee of the Mathematics Department
- Chair of Tenure Committee for Dr. Zhang, Mathematics Department
- Member of Tenure Committee for Dr. He, Mathematics Department
- Member of Tenure Committee for Dr. Ramyaa, Computer Science Department
- Member of Five-Year Plan Committee of the Mathematics Department
- Member of Ph.D. Preliminary Examination Committee in Analysis.
- Committee Member of several Masters and Ph.D students in Mathematics.
- Committee Member of several Masters and Ph.D students in Computer Science.
- Organizer of the seminar of Infinite-Dimensional Dynamical Systems, 2009.
- Attended the advising workshops organized by the Advising Resource Center in 2006, 2007, 2008 and 2009.
- Conducted mathematics placement test in 2008 and 2009.
- Participated the TA training program in the Department of Mathematics in 2006.
- Participated the Exploration Day event in 2006.

TEACHING

Graduate Students Supervised

1. Timothy Trujillo, Master's student, completed in 2008. Thesis title: *Attractors for Non-linear Reaction Diffusion Equations in Unbounded Domains*. Currently instructor at Colorado School of Mines.
2. Siyu Lin, Master's student, completed in 2008. Thesis title: *Well-posedness and dynamics of the three-dimensional Brinkman-Forchheimer equation*. Currently Ph.D student at University of Virginia.
3. Xiaoling Gao, Master's student, completed in 2010. Thesis title: *Upper Semicontinuity of Random Attractors for FitzHugh-Nagumo Systems on Unbounded Domains*. Currently Ph.D student at University of Massachusetts.
4. Robert Jones, Master's student, completed in 2010. Thesis title: *Random Attractors for a Class of Stochastic Wave Equations*. Currently Navy Officer.
5. Abiti Adili, Master's student, completed in 2013. Thesis title: *Random Attractors for Stochastic FitzHugh-Nagumo Systems*. Currently Ph.D student at Louisiana State University.

6. Andrew Krause, Master's student, completed in 2014. Thesis title: *Asymptotic Dynamics of Stochastic p -Laplace Equations on Unbounded Domains*. Currently Ph.D student at University of Oxford, UK.
7. Ayla Attanasio, Master's student, expected in May 2019.
8. Henri Ndaya, Ph.D. student, expected in May 2021.
9. Christian Morris, Master's student, expected in May 2020.
10. Nils Carlson, Master's student, expected in May 2020.

Publications of Graduate Students Supervised

1. **Andrew Krause** and Bixiang Wang, Pullback Attractors of Non-autonomous Stochastic Degenerate Parabolic Equations on Unbounded Domains, *J. Math. Anal. Appl.*, **417** (2014), 1018-1038.
2. **Andrew Krause**, Michael Lewis and Bixiang Wang, Dynamics of the non-autonomous stochastic p -Laplace equation driven by multiplicative noise, *Applied Mathematics and Computation*, **246** (2014), 365-376.
3. **Abiti Adili** and Bixiang Wang, Random attractors for non-autonomous stochastic FitzHugh-Nagumo systems with multiplicative noise, *Continuous and Discrete Dynamical Systems*, Supplement (2013), 1-10.
4. **Abiti Adili** and Bixiang Wang, Random attractors for stochastic FitzHugh-Nagumo systems driven by deterministic non-autonomous forcing, *Continuous and Discrete Dynamical Systems Series B*, **18** (2013), 643-666.
5. **Robert Jones** and Bixiang Wang, Asymptotic behavior of a class of stochastic nonlinear wave equations with dispersive and dissipative terms, *Nonlinear Analysis, Real World Applications*, **14** (2013), 1308-1322.
6. Bixiang Wang and **Xiaoling Gao**, Random attractors for wave equations on unbounded domains, *Discrete and Continuous Dynamical Systems*, Supplement (2009), 800-809.
7. **Guglielmo Fucci**, Bixiang Wang and **Preeti Singh**, Asymptotic behavior of the Newton-Boussinesq equation in a two-dimensional channel, *Nonlinear Analysis TMA*, **70** (2009), 2000-2013.
8. Bixiang Wang and **Siyu Lin**, Existence of global attractors for the three-dimensional Brinkman-Forchheimer equation, *Mathematical Methods in the Applied Sciences*, **31** (2008), 1479-1495.
9. **Timothy Trujillo** and Bixiang Wang, Continuity of strong solutions of the Reaction-Diffusion equation in initial data, *Nonlinear Analysis TMA*, **69** (2008), 2525-2532.
10. Bixiang Wang, Daniel W. Fussner and **Chenggeng Bi**, Existence of global attractors for the Benjamin-Bona-Mahony equation in unbounded domains, *J. Phys. A*, **40** (2007), 10491-10504.

Publications of Undergraduate Students Supervised

1. Andrew Krause, **Michael Lewis** and Bixiang Wang, Dynamics of the non-autonomous stochastic p -Laplace equation driven by multiplicative noise, *Applied Mathematics and Computation*, **246** (2014), 365-376.
2. **Kasimir Gabert** and Bixiang Wang, Non-autonomous attractors for singularly perturbed parabolic equations on \mathbb{R}^n , *Nonlinear Analysis TMA*, **73** (2010) 3336-3347.
3. Bixiang Wang and **Robert Jones**, Asymptotic behavior of a class of non-autonomous degenerate parabolic equations, *Nonlinear Analysis TMA*, **72** (2010) 3887-3902.
4. Bixiang Wang, **Daniel W. Fussner** and Chenggeng Bi, Existence of global attractors for the Benjamin-Bona-Mahony equation in unbounded domains, *J. Phys. A*, **40** (2007), 10491-10504.

Courses Taught at New Mexico Tech

1. Introduction to Stochastic Differential Equations (Fall 2018), three credit hours per week.
2. Complex Analysis (Fall 2018), three credit hours per week.
3. Introduction to Analysis (Spring 2018), three credit hours per week.
4. Basic Concept of Mathematics (Spring 2018), three credit hours per week.
5. Complex Analysis (Fall 2017), three credit hours per week.
6. Dynamics of Stochastic PDEs (Fall 2017), three credit hours per week.
7. Basic Concept of Mathematics (Fall 2017), three credit hours per week.
8. Calculus III (Summer 2017), five credit hours per week.
9. Dynamics of PDEs (Spring 2017), three credit hours per week.
10. Basic Concept of Mathematics (Spring 2017), three credit hours per week.
11. Functional Analysis (Fall 2016), three credit hours per week.
12. Basic Concept of Analysis (Fall 2016), three credit hours per week.
13. Complex Analysis (Fall 2016), three credit hours per week.
14. Ordinary Differential Equations (Summer 2016), five credit hours per week.
15. Introduction to Analysis (Spring 2016), three credit hours per week.
16. Partial Differential Equations (Spring 2016), three credit hours per week.
17. Vector Analysis (Fall 2015), three credit hours per week.
18. Basic Concept of Analysis (Fall 2015), three credit hours per week.
19. Complex Analysis (Fall 2015), three credit hours per week.

20. Calculus III (Summer 2015), five credit hours per week.
21. Introduction to Analysis (Spring 2015), three credit hours per week.
22. Partial Differential Equations (Spring 2015), three credit hours per week.
23. Basic Concept of Analysis (Fall 2014), three credit hours per week.
24. Complex Analysis (Fall 2014), three credit hours per week.
25. Functional Analysis (Fall 2014), three credit hours per week.
26. Introduction to Analysis (Spring 2014), three credit hours per week.
27. Partial Differential Equations (Spring 2014), three credit hours per week.
28. Dynamics of Non-Autonomous PDEs (Fall 2013), three credit hours per week.
29. Complex Analysis (Fall 2013), three credit hours per week.
30. Partial Differential Equations (Spring 2013), three credit hours per week.
31. Dynamics of Partial Differential Equations (Spring 2013), three credit hours per week.
32. Introduction to Analysis (Spring 2013), three credit hours per week.
33. Calculus I (Summer 2012), four credit hours per week.
34. Introduction to Analysis (Spring 2012), three credit hours per week.
35. Functional Analysis (Spring 2012), three credit hours per week.
36. Partial Differential Equations (Spring 2012), three credit hours per week.
37. Basic Concepts of Analysis (Fall 2011), three credit hours per week.
38. Introduction to Partial Differential Equations (Fall 2011), three credit hours per week.
39. Topics on Partial Differential Equations (Spring 2011), three credit hours per week.
40. Introduction to Analysis (Spring 2011), three credit hours per week.
41. Functional Analysis (Fall 2010), three credit hours per week.
42. Vector Analysis (Fall 2010), three credit hours per week.
43. Partial Differential Equations (Spring 2010), three credit hours per week.
44. Introduction to Analysis (Spring 2010), three credit hours per week.
45. Introduction to Partial Differential Equations (Fall 2009), three credit hours per week.
46. Vector Analysis (Fall 2009), three credit hours per week.
47. Non-Autonomous Dynamical Systems (Spring 2009), three credit hours per week.

48. Introduction to Analysis (Spring 2009), three credit hours per week.
49. Vector Analysis (Fall 2008), two sessions, six credit hours per week.
50. Topics on Partial Differential Equations (Fall 2008), three credit hours per week.
51. Calculus I (Spring 2008), four credit hours per week.
52. Calculus II (Spring 2008), four credit hours per week.
53. Functional Analysis (Spring 2008), directed study.
54. Dynamics of Partial Differential Equations (Spring 2008), directed study.
55. Vector Analysis (Fall 2007), three credit hours per week.
56. Introduction to Partial Differential Equations (Fall 2007), three credit hours per week.
57. Dynamics of Partial Differential Equations II (Fall 2007), three credit hours per week.
58. Functional Analysis (Fall 2007), directed study.
59. Introduction to Analysis (Summer 2007), directed study.
60. Dynamics of Partial Differential Equations I (Spring 2007), three credit hours per week.
61. Introduction to Analysis (Spring 2007), three credit hours per week.
62. Introduction to Topology (Spring 2007), directed study.
63. Functional Analysis (Fall 2006), three credit hours per week.
64. Introduction to Partial Differential Equations (Fall 2006), three credit hours per week.
65. Calculus III (Fall 2006), four credit hours per week.
66. Partial Differential Equations (Spring 2006), three credit hours per week.
67. Introduction to Analysis (Spring 2006), three credit hours per week.
68. Calculus II (Spring 2006), four credit hours per week.
69. Calculus II (Fall 2005), four credit hours per week.
70. Introduction to Partial Differential Equations (Fall 2005), three credit hours per week.

Courses Taught at University of Kansas (Visiting Assistant Professor)

71. Elementary Statistics (Spring 2005), three credit hours per week.
72. Calculus II (Spring 2005), three credit hours per week.
73. Calculus I (Fall 2004), five credit hours per week.

- 74. Calculus II (Spring 2004), five credit hours per week.
- 75. Calculus I (Fall 2003), five credit hours per week.

Courses Taught at McMaster University (Teaching Assistant)

- 76. Algorithms for Continuous Optimization (Spring 2003).
- 77. Scientific Computing and Continuous Optimization (Fall 2002).
- 78. Scientific Computing and Continuous Optimization (Fall 2001).

Courses Taught at University of Texas-Pan American (Visiting Assistant Professor)

- 79. Calculus I (Fall 2000), eight credit hours per week.
- 80. Calculus II (Fall 2000), four credit hours per week.

Courses Taught at Brigham Young University (Visiting Assistant Professor)

- 81. Ordinary Differential Equations (Spring 2000), six credit hours per week.
- 82. Advanced Engineering Math. (Fall 1999), six credit hours per week.
- 83. Ordinary Differential Equations (Summer 1999), six credit hours per week.

Courses Taught at Tsinghua University (Assistant Professor)

- 84. Nonlinear Analysis (Spring 1997), six credit hours per week.
- 85. Functional Analysis (Fall 1996), six credit hours per week.