

# Baowei Feng

**Email: [bwfeng@swufe.edu.cn](mailto:bwfeng@swufe.edu.cn)**

**Department of Mathematics, Southwestern University of Finance and Economics,  
Chengdu 611130, Sichuan, P. R. China**

## **Academic Qualifications:**

- Doctoral, Control Theory and Engineering, Donghua University (2014)
- Master, Mathematics, Donghua University (2011)
- Bachelor, Mathematics, Southwest Minzu University (2009)

## **Brief Career History:**

- Associate Professor at Southwestern University of Finance and Economics, China (2018 – now)
- Lecturer at Southwestern University of Finance and Economics, China (2014 – 2017)
- Visiting researcher at Technical University Bergakademie Freiberg, Germany, (2012)

## **Field(s) of Specialization:**

Evolutionary Partial Differential Equations, Control Theory, Long-time Dynamics.

## **Current Research Areas/Topics:**

well-posedness, stability, attractors for porous-elastic system with/without thermal effects, laminated beam, mixtures of elastic materials, flexible structures and so on.

## **Editor:**

Journal of Function Spaces, Mathematical Problems in Engineering

## **Publications:**

1. **B. Feng**, Y. Guo and M. A. Rammaha, On the asymptotic behavior of solutions to a structural acoustics model. *J. Differential Equations* 372 (2023), 315–347.
2. **B. Feng**, M.M. Freitas, D.S. Almeida Júnior, A.J.A. Ramos and R.Q. Caljaro, Global attractors for porous-elasticity system from second spectrum viewpoint. *Nonlinear Analysis: Real World Applications* 74 (2023), 103922.
3. **B. Feng** and A. Ö. Özer, Long-time behavior of a nonlinearly-damped three-layer Rao–Nakra sandwich beam. *Appl. Math. Optim.* 87 (2023), art. 19, 52pp.

4. **B. Feng** and A. Ö. Özer, Stability results for piezoelectric beams with long-range memory effects in the boundary. *Math. Nachr.* 296 (2023), 4206–4235
5. **B. Feng**, W. Youssef, T. El Arwadi, Polynomial and exponential decay rates of a laminated beam system with thermodiffusion effects. *J. Math. Anal. Appl.* 517(2023), 126633.
6. **B. Feng**, S. A. Messaoudi, A. Soufyane and M. Zahri, Optimal memory-type boundary control of the Bresse system. *Asymp. Anal.* 132 (2023), 29–60.
7. **B. Feng**, A. Soufyane and M. Afilal, New general decay results for a multi-dimensional Bresse system with viscoelastic boundary conditions. *Math. Control Rel. Fields* 13(2023), 1577-1596
8. **B. Feng**, C. A. Raposo, C. A. Nonato and A. Soufyane. Analysis of exponential stabilization for Rao-Nakra sandwich beam with time-varying weight and time-varying delay: Multiplier method versus observability. *Math. Control Rel. Fields*, 13(2023), 631-663.
9. R. Wang, M. M.Freitas, **B. Feng** and A. J. A. Ramos, Global attractors and synchronization of coupled critical Lamé systems with nonlinear damping. *J. Differ. Equ.* 359(2023), 476–513.
10. H. Chellaoua, Y. Boukhatem and **B. Feng**, Well-posedness and stability for an abstract evolution equation with history memory and time delay in Hilbert space. *Advances in Differential Equations* 28 (2023), 953-980.
11. M. Balegh, B. Chentouf, **B. Feng** and Z. Hajjej, A general stability result for a von Karman system with memory and nonlinear boundary delay term. *Appl. Math. Lett.* 138 (2023) 108512
12. **B. Feng** and A. Ö. Özer, Exponential stability results for the boundary-controlled fully-dynamic piezoelectric beams with various distributed and boundary delays. *J. Math. Anal. Appl.*, 508(2022), 125845.
13. A. Kellechea and **B. Feng**, On general decay for a nonlinear viscoelastic equation. *Appl. Anal.* 102(2023), 1582-1600.
14. S. Fan and **B. Feng**, Memory-type boundary stabilization of a transmission problem for Kirchhoff wave equations. *Math. Methods Appl. Sci.*, 2022, doi:10.1002/mma.8116
15. A. Mounir, **B. Feng** and A. Soufyane, Uniform decay rates of a Bresse thermoelastic system in the whole space. *Math Methods Appl. Sci.*, 2022, doi: 10.1002/mma.8362
16. B. Chentouf and **B. Feng**, On the stabilization of a flexible structure via a nonlinear delayed boundary control. *Discrete Conti. Dyn. Sys. B*, 2022, doi: 10.3934/dcdsb.2022032

17. **B. Feng**, D. S. Almeida Júnior and A. J. A. Ramos, Exponential stabilization of laminated beams with history memories. *Math. Nachr.*, 294: 559–579, 2021.
18. **B. Feng**, Exponential stabilization of a Timoshenko system with thermodiffusion effects. *Z. Angew. Math. Phys.*, 72(138): 18pp, 2021.
19. **B. Feng**, L. Yan and D. S. Almeida Júnior, Stabilization for an inhomogeneous porous-elastic system with temperature and microtemperature. *Z. Angew. Math. Mech.* 101: e202000058, 2021.
20. **B. Feng** and B. Chentouf, Exponential stabilization of a microbeam system with a boundary or distributed time delay. *Math. Method Appl Sci.*, 44: 11613–11630 , 2021.
21. D. S. Almeida Junior, **B. Feng**, M. Afilal and A. Soufyane, The optimal decay rates for viscoelastic Timoshenko type system in the light of the second spectrum of frequency. *Z. Angew. Math. Phys.*, 72(147), 34pp, 2021.
22. M. Afilal, **B. Feng** and A. Soufyane, New decay rates for Cauchy problem of Timoshenko thermoelastic systems with past history: Cattaneo and Fourier law. *Math. Method Appl Sci.*, 44: 11873–11894, 2021.
23. M. J. Dos Santos, **B. Feng**, D. S. Almeida Júnior and M. L. Santos, Global and exponential attractors for a nonlinear porous elastic system with delay term. *Discrete Conti. Dyna. Sys. – B*, 26(5): 2805-2828, 2021.
24. C. Nonato, C. Raposo and **B. Feng**, Exponential stability for a thermoelastic laminated beam with nonlinear weights and time-varying delay. *Asymp. Anal.*, 126:157–185, 2021.
25. H. Chellaoua, Y. Boukhatem and **B. Feng**, Optimal decay of an abstract nonlinear viscoelastic equation in Hilbert spaces with delay term in the nonlinear internal damping. *Asymp. Anal.*, 126: 65-94, 2021.
26. H. Makheloufi, M, Bahlil and **B. Feng**, Optimal polynomial decay for a Timoshenko system with a strong damping and a strong delay. *Math. Method Appl Sci.*, 44:6301–6317, 2021.
27. **B. Feng**, On a thermoelastic laminated Timoshenko beam: well posedness and stability. *Complexity*, 2020: 13pp, 2020.
28. **B. Feng** and A. Soufyane, New general decay results for a von Karman plate equation with memory-type boundary conditions. *Discrete Conti. Dyn. Sys.*, 40(3): 1757-1774, 2020.
29. **B. Feng**, M. A. Jorge Silva and A. H. Caixeta, Long-time behavior for a class of semi-linear viscoelastic Kirchhoff beams/plates. *Appl. Math. Optim.*, 82: 657-686, 2020.
30. **B. Feng** and A. Soufyane, Optimal decay rates of a nonlinear time-delayed viscoelastic wave equation. *Differ. Integral Equ.*, 33(1-2): 43-65; 2020.

31. **B. Feng** and A. Soufyane, Memory-type boundary control of a laminated Timoshenko beam. *Math. Mech. Solids*, 25(8): 1568-1588, 2020.
32. **B. Feng** and A. Soufyane, Existence and decay rates for a coupled Balakrishnan-Taylor viscoelastic system with dynamic boundary conditions. *Math. Methods Appl. Sci.*, 43: 3375-3391, 2020.
33. **B. Feng** and M. Zahri, Optimal decay rate estimates of a nonlinear viscoelastic Kirchhoff plate. *Complexity*, 2020: 14pp, 2020.
34. **B. Feng** and H. Li, Decay rates for a coupled viscoelastic Lamé system with strong damping. *Math. Model. Anal.*, 25: 226-240, 2020.
35. **B. Feng**, D. S. Almeida Junior, M. J. dos Santos and L. G. Rosário Miranda, A new scenario for stability of nonlinear Bresse-Timoshenko type systems with time dependent delay. *Z. Angew Math. Mech.*, 100: e201900160, 2020.
36. G. Liu, **B. Feng** and X. Yang, Longtime dynamics for a type of suspension bridge equation with past history and time delay. *Commun. Pure Appl. Anal.*, 19(10): 4995-5013, 2020.
37. M. Bahlil and **B. Feng**, Global existence and energy decay of solutions to a coupled wave and Petrovsky system with nonlinear dissipations and source terms. *Mediterr. J. Math.*, 17(60): 27pp, 2020.
38. **B. Feng**, Z. Hajje and M. Balegh, Existence and general decay rate estimates of a coupled Lamé system only with viscoelastic dampings. *Math. Methods Appl. Sci.*, 2020, DOI: 10.1002/mma.6586.
39. A. Choucha, D. Ouchenane, K. Zennir and **B. Feng**, Global well-posedness and exponential stability results of a class of Bresse-Timoshenko-type systems with distributed delay term. *Math. Methods Appl. Sci.*, 2020, DOI: 10.1002/mma.6437.
40. **B. Feng** and H. Li, Long-time dynamics of a non-uniform flexible structure with thermal memory. *Acta Math. Sin., Chinese Ser.*, accepted, 2020.
41. **B. Feng**, On the decay rates for a one-dimensional porous elasticity system with past history. *Commun. Pure Appl. Anal.*, 18(6): 2905-2921, 2019.
42. **B. Feng**, Global regularity of solutions for a one-dimensional nuclear fluid with non-monotone pressure. *Acta Math. Appl. Sin.*, 35(4):798–811, 2019.
43. **B. Feng** and T. A. Apalara, Optimal decay for a porous elasticity system with memory. *J. Math. Anal. Appl.*, 470: 1108-1128, 2019.
44. **B. Feng** and M. Yin, Decay of solutions for a one-dimensional porous elasticity system with memory: the case of non-equal wave speeds. *Math. Mech. Solids*, 24(8): 2361-2373, 2019.

45. **B. Feng** and Y. H. Kang, Decay rates for a viscoelastic wave equation with Balakrishnan-Taylor and frictional dampings. *Topol. Method Nonlinear Anal.*, 54(1): 321-343, 2019.
46. **B. Feng**, X. Yang and K. Su, Well-posedness and stability for a viscoelastic wave equation with density and time-varying delay in  $\mathbb{R}^n$ . *J. Integral Equ. Appl.*, 31(4): 465-493, 2019.
47. **B. Feng**, H-C Zhou and X. Yang, Uniform boundness of global solutions for a n-dimensional spherically symmetric combustion model. *Appl. Anal.*, 98(15): 2688–2722, 2019.
48. **B. Feng**, K. Zennir and L. K. Laouar, Decay of an extensible viscoelastic plate equation with a nonlinear time delay. *B. Malays. Math. Sci. Soc.*, 42: 2265-2285, 2019.
49. **B. Feng** and G. Liu, Well-posedness and stability of two classes of plate equations with memory and strong time-dependent delay, *Taiwan. J. Math.*, 23: 159-192, 2019.
50. X. Yang, **B. Feng**, S. Wang, Y. Lu and T. F. Ma, Pullback dynamics of 3D Navier–Stokes equations with nonlinear viscosity. *Nonlinear Anal: Real World Appl.*, 48: 337-361, 2019.
51. X. Yang, **B. Feng**, T. M. de Souza and T. Wang, Long-time dynamics for a non-autonomous Navier-Stokes-Voigt equation in Lipschitz domains. *Discrete Conti. Dyn. Sys.-B*, 24(1): 363-386, 2019.
52. **B. Feng**, General decay rates for a viscoelastic wave equation with dynamic boundary conditions and past history. *Mediterr. J. Math.*, 15: art. 103, 2018.
53. **B. Feng**, General decay for a viscoelastic wave equation with density and time delay term in  $\mathbb{R}^n$ . *Taiwan. J. Math.*, 22: 205-223, 2018.
54. **B. Feng**, Long-time dynamics of a plate equation with memory and time delay. *B. Braz. Math. Soc.*, 49: 395-418, 2018.
55. **B. Feng**, Well-posedness and exponential decay for laminated Timoshenko beams with time delays and boundary feedbacks. *Math. Methods Appl. Sci.*, 41: 1162-1174, 2018.
56. **B. Feng**, Uniform decay of energy for a porous thermoelasticity system with past history. *Appl. Anal.*, 97: 210-229, 2018.
57. **B. Feng** and K. Su, Uniform decay for a fourth-order viscoelastic equation with density in  $\mathbb{R}^n$ . *Acta Math. Sci., Chinese Ser.*, 28:122-133, 2018.
58. **B. Feng**, T. F. Ma, R. N. Monteiro and C. A. Raposo, Dynamics of laminated Timoshenko beams. *J. Dyn. Differ. Equ.*, 30: 1489-1507, 2018.
59. **B. Feng**, On a semilinear Timoshenko-Coleman-Gurtin system: quasistability and attractors. *Discrete Conti. Dyn. Sys.*, 37(9): 4729-4751, 2017.
60. **B. Feng**, Well-posedness and exponential stability for a plate equation with time-varying delay and past history. *Z. Angew. Math. Phys.*, 68(6): 1-24, 2017.

61. **B. Feng**, General decay for a viscoelastic wave equation with strong time-dependent delay. *Bound. Value Prob.*, 57: 13pp, 2017.
62. **B. Feng** and X. Yang, Long-time dynamics for a nonlinear Timoshenko system with delay. *Appl. Anal.*, 96(4): 606-625, 2017.
63. **B. Feng**, X. Yang and Y. Qin, Uniform attractors for a nonautonomous extensible plate equation with a strong damping. *Math. Methods Appl. Sci.*, 40: 3479-3492, 2017.
64. **B. Feng** and H. Li, General decay of solutions to a one-dimensional thermoelastic beam with variable coefficients. *Bound. Value Prob.*, 158: 13pp, 2017.
65. Y. Qin and **B. Feng**, Large-time behavior of solutions to a 1D liquid crystal system. *Math. Methods Appl. Sci.*, 40: 7077–7103, 2017.
66. **B. Feng** and H. Li, Energy decay for a viscoelastic Kirchhoff plate equation with a delay term. *Bound. Value Prob.*, 174: 16pp, 2016.
67. **B. Feng**, M. L. Pelicer and D. Andrade, Long-time behavior of a semilinear wave equation with memory. *Bound. Value Prob.*, 37: 13pp, 2016.
68. **B. Feng**, Uniform attractors for a nonlinear non-autonomous extensible plate equation. *Chinese Ann. Math., Chinese Ser.*, 37: 15-30, 2016.
69. **B. Feng**, Global well-posedness and stability for a viscoelastic plate equation with a time delay. *Math. Prob. Eng.*, 2015: 10pp, 2015.
70. **B. Feng** and M. L. Pelicer, Global existence and exponential stability for a nonlinear Timoshenko system with delay. *Bound. Value Prob.*, 206: 15pp, 2015.
71. Y. Qin, **B. Feng** and M. Zhang, Large-time behavior of solutions for the 1D viscous heat-conducting gas with radiation: the pure scattering case. *J. Differ. Equ.*, 256: 989-1042, 2014.
72. Y. Qin, **B. Feng** and M. Zhang, Uniform attractors for a nonautonomous viscoelastic equation with a past history. *Nonlinear Anal.*, 101: 1-15, 2014.
73. **B. Feng** and X. Yang, Large-time behaviour for the compressible Navier-Stokes equations with a non-autonomous external force and a heat source. *ScienceAsia*, 39: 194-203, 2013.
74. Y. Qin, M. Zhang, **B. Feng** and H. Li, Global existence and asymptotic behavior of solutions for thermodiffusion equations. *J. Math. Anal. Appl.*, 408: 140-153, 2013.
75. **B. Feng**, Y. Qin and M. Zhang, General decay for a system of nonlinear viscoelastic wave equations with weak damping. *Bound. Value Prob.*, 146: 11pp, 2012.
76. Y. Qin, **B. Feng** and M. Zhang, Large-time behavior of solutions for the one-dimensional infrarelativistic model of a compressible viscous gas with radiation. *J. Differ. Equ.*, 252: 6175-6213, 2012.