# PERSONAL INFORMATION

• Name: Yanli Huang

• Title: Professor

• Institution: School of Computer Science and Technology

• Affiliation: Tiangong University (Tianjin Polytechnic University)

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# WORK EXPERIENCE

- Professor, School of Computer Science and Technology, Tiangong University
  - December 2024 present
- Associate Professor, School of Computer Science and Technology, Tiangong University
  - December 2015 December 2024
- Visiting Scholar, Department of Design, Manufacture and Engineering Management (DMEM), Faculty of Engineering, University of Strathclyde
  - July 29, 2024 August 26, 2024
  - Cooperated with Dr. Tse Chiu Wong (Senior Lecturer)
- Visiting Scholar, Department of Design, Manufacture and Engineering Management (DMEM), Faculty of Engineering, University of Strathclyde
  - December 2018 December 2019
  - Cooperated with Dr. Erfu Yang (Senior Lecturer)
- Assistant Professor,, School of Computer Science and Software, Tiangong University
  - July 2012 December 2015

# **EDUCATION**

- Ph.D., School of Mathematics and Systems Science, Beihang University
  - September 2008 July 2012
  - Major: Applied mathematics, Research direction: Computer algebra
  - Supervisors: Dongming Wang (European academy of sciences, MOE Cheung Kong Professor of Computer Mathematics, Guangxi Bagui Scholar, CNRS Research director),
     Franz Winkler (RISC Full Professor, vice director)
  - Main experience for study abroad and visiting:
    - \* October 2010 October 2011: **Joint Ph.D Student**, Research Institute for Symbolic Computation (RISC), **Johannes Kepler University Linz**, Austria
    - \* May 2010 July 2010: **Visiting Scholar**, Research Institute for Symbolic Computation (RISC), **Johannes Kepler University Linz**, Austria
    - \* October December 2009: Visiting Scholar, Research Institute for Symbolic Computation (RISC), Johannes Kepler University Linz, Austria
- Master study, preparing for doctoral study in advance, School of Mathematics and Systems Science, Beihang University



- September 2006 July 2008
- Supervisor: **Prof. Meng Zhou**
- B.S., School of Mathematics and Computer Science, Shanxi Normal University
  - September 2002 July 2006

#### RESEARCH INTERESTS

- Complex dynamical networks
- Passivity and synchronization
- Stability theory and applications

## **PUBLICATIONS**

- 1. Yanli Huang\*, Yuqing Jia, Aperiodically intermittent  $H_{\infty}$  synchronization of coupled complex-valued neural networks with and without parameter uncertainties, *Physica D: Nonlinear Phenomena* (SCI), accept, 2025.
- Yanli Huang, Yaxin Gao, Limei Su, Tse Chiu Wong\*, Predefined-time synchronization of coupled competitive neural networks, *International Journal of Adaptive Control and Signal Processing* (SCI), 39(3): 609-621, 2025.
- Yanli Huang\*, Aobo Li, General decay anti-synchronization of coupled delayed memristive neural networks with constant and time-varying distributed-delay coupling, *Neurocomputing* (SCI), 618: 129058, 2025.
- 4. Yanli Huang\*, Aobo Li, General decay anti-synchronization and H<sub>∞</sub> anti-synchronization of derivative coupled delayed memristive neural networks with constant and delayed state coupling, Communications in Nonlinear Science and Numerical Simulation (SCI), 139: 108313, 2024.
- Yanli Huang\*, Xin Zhao, General decay synchronization of state and spatial diffusion coupled delayed memristive neural networks with reaction-diffusion terms, *International Journal of Control, Automation and Systems* (SCI), 22(7): 2313-2326, 2024.
- Yanli Huang\*, Qing Hao, Finite-time and pinning synchronization of multi-weighted delayed coupled Cohen-Grossberg neural networks, Neural Computing and Applications (SCI), 36: 483-504, 2024.
- 7. Yanli Huang\*, Limei Su, General decay anti-synchronization and  $H_{\infty}$  anti-synchronization of coupled reaction-diffusion complex-valued memristive neural networks, *Communications in Nonlinear Science and Numerical Simulation*(SCI), 126, 107451, 2023.
- 8. Yanli Huang\*, Xin Xiao, Yihao Wang, Jiang Li, Event-triggered pinning synchronization and robust pinning synchronization of coupled neural networks with multiple weights, *International Journal of Adaptive Control and Signal Processing* (SCI), 37(3): 584-602, 2023.
- 9. Yanli Huang\*, Fang Wu, Finite-time passivity and synchronization of coupled complex-valued memristive neural networks, *Information Sciences* (SCI), 580: 775-800, 2021.
- 10. Yanli Huang, Shanrong Lin\*, Xiwei Liu,  $H_{\infty}$  synchronization and robust  $H_{\infty}$  synchronization of coupled neural networks with non-identical nodes, Neural Processing Letters (SCI), 53(5): 3467-3496, 2021.
- 11. Yanli Huang\*, Shanrong Lin, Erfu Yang, Event-triggered passivity of multi-weighted coupled delayed reaction-diffusion memristive neural networks with fixed and switching topologies, Communications in Nonlinear Science and Numerical Simulation (SCI), 89: 105292, 2020.

- 12. Yanli Huang\*, Jie Hou, Erfu Yang, Passivity and synchronization of coupled reaction-diffusion complex-valued memristive neural networks, *Applied Mathematics and Computation*(SCI), 379: 125271, 2020.
- 13. Yanli Huang\*, Jie Hou, Erfu Yang, General decay lag anti-synchronization of multi-weighted delayed coupled neural networks with reaction-diffusion terms, *Information Sciences* (SCI), 511: 36-57, 2020.
- 14. Yanli Huang\*, Jie Hou, Erfu Yang, General decay anti-synchronization of multi-weighted coupled neural networks with and without reaction-diffusion terms, *Neural Computing and Applications* (SCI), 32(12): 8417-8430, 2020.
- 15. Yanli Huang\*, Shuihan Qiu, Shunyan Ren, Finite-time synchronization and passivity of coupled memristive neural networks, *International Journal of Control* (SCI), 93(12): 2824-2837, 2020.
- Yanli Huang, Shuihan Qiu, Shunyan Ren, Zewei Zheng\*, Fixed-time synchronization of coupled Cohen-Grossberg neural networks with and without parameter uncertainties, *Neuro-computing* (SCI), 315: 157-168, 2018.
- 17. Yanli Huang, Weizhong Chen, Shunyan Ren, Zewei Zheng\*, Analysis and pinning control for generalized synchronization of delayed coupled neural networks with different dimensional nodes, *Journal of the Franklin Institute* (SCI), 355: 5968-5997, 2018.
- Yanli Huang, Weizhong Chen, Jianming Wang\*, Finite-time passivity of delayed multiweighted complex dynamical networks with different dimensional nodes, *Neurocomputing* (SCI), 312: 74-89, 2018.
- 19. Yanli Huang, Weizhong Chen, Shunyan Ren, Zewei Zheng\*, Passivity and synchronization of coupled reaction-diffusion Cohen-Grossberg neural networks with fixed and switching topologies, *Neural Processing Letters* (SCI), 49(3): 1433-1457, 2019.
- 20. Yanli Huang\*, Shunyan Ren, Passivity and passivity-based synchronization of switched coupled reaction-diffusion neural networks with state and spatial diffusion couplings, *Neural Processing Letters* (SCI), 47: 347-363, 2018.
- 21. Yanli Huang\*, Shunyan Ren, Jigang Wu, Beibei Xu, Passivity and synchronization of switched coupled reaction-diffusion neural networks with non-delayed and delayed couplings, *International Journal of Computer Mathematics* (SCI), 96(9): 1702-1722, 2019.
- 22. Yanli Huang\*, Shuxue Wang, Shunyan Ren, Pinning exponential synchronization and passivity of coupled delayed reaction-diffusion neural networks with and without parametric uncertainties, *International Journal of Control* (SCI), 92(5): 1167-1182, 2019.
- 23. Yanli Huang\*, Shuxue Wang, Synchronisation in an array of spatial diffusion coupled reaction-diffusion neural networks via pinning control, *International Journal of Systems Science* (SCI), 49(5): 1103-1118, 2018.
- 24. Yanli Huang\*, Beibei Xu, Shunyan Ren, Analysis and pinning control for passivity of coupled reaction-diffusion neural networks with nonlinear coupling, *Neurocomputing* (SCI), 272: 334-342, 2018.
- Yanli Huang\*, L. X. Châu Ngô, Franz Winkler, Rational general solutions of higher order algebraic ODEs, Journal of System Science and Complexity (SCI), 26(2): 261-280, 2013.
- 26. Yanli Huang\*, Dongming Wang, Computing intersection and self-intersection loci of parametrized surfaces using regular systems and Gröbner bases, Computer Aided Geometric Design (SCI) 28(9): 566-581, 2011.
- 27. Limei Su, Yanli Huang\*, Antisynchronization and generalized pinning control of multiweighted coupled complex-valued delayed memristive neural networks, *Discrete Dynamics in Nature and Society* (SCI), 5220356, 2023.

- 28. Qing Hao, **Yanli Huang\***, Analysis and aperiodically intermittent control for synchronization of multi-weighted coupled Cohen-Grossberg neural networks without and with coupling delays, *Information Sciences* (**SCI**), 607: 377-400, 2022.
- 29. Fang Wu, Yanli Huang\*, Finite-time synchronization and  $H_{\infty}$  synchronization of coupled complex-valued memristive neural networks with and without parameter uncertainty, *Neuro-computing* (SCI), 469: 163-179, 2022.
- 30. Jianmou Lu, Yanli Huang\*, Shunyan Ren, General decay synchronization and  $H_{\infty}$  synchronization of spatial diffusion coupled delayed reaction-diffusion neural networks, *ISA Transactions* (SCI), 101: 234-245, 2020.
- 31. Jianmou Lu, **Yanli Huang\***, Shunyan Ren, General decay synchronization and  $H_{\infty}$  synchronization of multi-weighted coupled reaction-diffusion neural networks, *International Journal of Control, Automation and Systems* (**SCI**), 18(5): 1250-1263, 2020.
- 32. Yihao Wang, Yanli Huang\*, Erfu Yang, Event-triggered communication for passivity and synchronization of multi-weighted coupled neural networks with and without parameter uncertainties, *IET Control Theory & Applications* (SCI), 14(9): 1228-1239, 2020.
- 33. Jie Hou, Yanli Huang\*, Shunyan Ren, Anti-synchronization analysis and pinning control of multi-weighted coupled neural networks with and without reaction-diffusion terms, *Neurocomputing* (SCI), 330: 78-93, 2019.
- 34. Jie Hou, Yanli Huang\*, Erfu Yang,  $\psi$ -type stability of reaction-diffusion neural networks with time-varying discrete delays and bounded distributed delays, *Neurocomputing* (SCI), 340: 281-293, 2019.
- 35. Jie Hou, **Yanli Huang\***, Erfu Yang, Finite-time anti-synchronization of multi-weighted coupled neural networks with and without coupling delays, *Neural Processing Letters* (**SCI**), 50(3), 2871-2898, 2019.
- 36. Shanrong Lin, **Yanli Huang\***, Erfu Yang, Passivity and synchronization of coupled different dimensional delayed reaction-diffusion neural networks with Dirichlet boundary conditions, *Complexity* (**SCI**), 2020: 4987962, 2020.
- Shanrong Lin, Yanli Huang\*, Shunyan Ren, Event-triggered passivity and synchronization of delayed multiple-weighted coupled reaction-diffusion neural networks with non-identical nodes, Neural Networks (SCI), 121: 259-275, 2020.
- 38. Shanrong Lin, Yanli Huang\*, Shunyan Ren, Analysis and pinning control for passivity of coupled different dimensional neural networks, *Neurocomputing* (SCI), 321: 187-200, 2018.
- 39. Weizhong Chen, **Yanli Huang\***, Shunyan Ren, Passivity and synchronization of coupled reaction-diffusion Cohen-Grossberg neural networks with state coupling and spatial diffusion coupling, *Neurocomputing* (SCI), 275: 1208-1218, 2018.
- 40. Weizhong Chen, **Yanli Huang\***, Shunyan Ren, Passivity and robust passivity of delayed Cohen-Grossberg neural networks with and without reaction-diffusion terms, *Circuits, Systems, and Signal Processing* (SCI), 37(7): 2772-2804, 2018.
- 41. Weizhong Chen, **Yanli Huang\***, Shunyan Ren, Passivity of coupled memristive delayed neural networks with fixed and adaptive coupling weights, *Neurocomputing* (**SCI**), 313:346-363, 2018.
- 42. Shuihan Qiu, **Yanli Huang\***, Shunyan Ren, Finite-time Synchronization of multi-weighted complex dynamical networks with and without coupling delay, *Neurocomputing* (**SCI**), 275: 1250-1260, 2018.
- 43. Shuihan Qiu, Yanli Huang\*, Shunyan Ren, Finite-time synchronization of coupled Cohen-Grossberg neural networks with and without coupling delays, *Journal of the Franklin Institute* (SCI), 355: 4379-4403, 2018.
- 44. Shuxue Wang, **Yanli Huang\***, Beibei Xu, Pinning synchronization of spatial diffusion coupled reaction-diffusion neural networks with and without multiple time-varying delays, *Neurocomputing* (**SCI**), 227: 92-100, 2016.

- 45. Beibei Xu, Yanli Huang\*, Jinliang Wang, Puchong Wei, Shunyan Ren, Passivity of linearly coupled neural networks with reaction-diffusion terms and switching topology, *Journal of the Franklin Institute* (SCI), 353(8): 1882-1898, 2016.
- 46. Xiaoliang Li, **Yanli Huang**\*, Zewei Zheng, Wanyou Cheng, Computing switching surfaces in optimal control based on triangular decomposition, *East Asian Journal on Applied Mathematics* (**SCI**), 4(4): 345-367, 2014.
- 47. Yanli Huang\*, Dongming Wang, Computing self-intersection loci of parametrized surfaces using regular systems and Gröbner bases, *Proceedings of SYNASC 2009*, *IEEE Computer Society* (EI, ISTP), Los Alamitos, CA, pp. 28-36, 2009.
- 48. Yanli Huang, Jigang Wu\*, Special solvable second order algebraic ordinary differential equations, Journal of Computational Information Systems (EI), 10(3): 1271-1278, 2014.
- 49. Yanli Huang\*, Xianliang Lv, Gen Chen, General decay projective synchronization of memristor-based fractional-order neural network, *Proceedings of the 37th Chinese Control and Decision Conference (CCDC 2025)* (EI), Xiamen, May 16-19, accept, 2025.
- 50. Yanli Huang\*, Yuhao Zhou, Synchronization of coupled complex-valued Cohen-Grossberg neural networks via aperiodically intermittent control, *Proceedings of the 37th Chinese Control and Decision Conference (CCDC 2025)* (EI), Xiamen, May 16-19, accept, 2025.
- 51. Yanli Huang\*, Chengqi Zhai, Finite-time passivity of coupled different dimensional neural networks with constant distributed-delay coupling, *Proceedings of the 37th Chinese Control and Decision Conference (CCDC 2025)* (EI), Xiamen, May 16-19, accept, 2025.
- 52. Yanli Huang\*, Wenjing Duan, Tse Chiu Wong, Robust general decay synchronization of state and spatial diffusion coupled reaction-diffusion memristive neural networks, *Proceedings of 2024 International Annual Conference on Complex Systems and Intelligent Science (CSIS-IAC)* (EI), Guangzhou, China, September 20-22, pp. 616-621, 2024.
- 53. Yanli Huang\*, Yaxin Gao, Xusong Li, Tse Chiu Wong, Predefined-time synchronization of coupled different dimensional neural networks, *Proceedings of the 36th Chinese Control and Decision Conference (CCDC 2024)* (EI), Xi'an, May 25-27, 1864-1869, 2024.
- 54. Yanli Huang\*, Yuqing Jia, Tse Chiu Wong, Aperiodically intermittent control synchronization of coupled complex-valued neural networks, *Proceedings of the 36th Chinese Control and Decision Conference (CCDC 2024)* (EI), Xi'an, May 25-27, 1329-1334, 2024.
- 55. Yanli Huang\*, Xin Zhao, Jianmou Lu, Jiang Li, General decay synchronization of state and spatial diffusion coupled reaction-diffusion memristive neural networks, *Proceedings of 2022 China Automation Congress (CAC 2022)* (EI), Xiamen, November 25-27, pp. 1156-1161, 2022.
- 56. Yanli Huang\*, Jie Hou, Shunyan Ren, Erfu Yang, Passivity and synchronization of coupled complex-valued memristive neural networks, *Proceedings of the 2019 IEEE Symposium Series on Computational Intelligence* (EI), Xiamen, China, December 6-9, pp. 2152-2159, 2019.
- 57. Yanli Huang, Jianming Wang\*, Erfu Yang, Robust passivity of coupled Cohen-Grossberg neural networks with reaction-diffusion terms, *Proceedings of the 25th IEEE International Conference on Automation and Computing* (EI), Lancaster, UK, September 5-7, 154394, 2019.
- 58. Yanli Huang\*, Beibei Xu, Shunyan Ren, Jinliang Wang, Weizhong Chen, Global exponential synchronization of nonlinearly coupled reaction-diffusion neural networks, *Proceedings of the 29th Chinese Control and Decision Conference* (EI), Chongqing, May 28-30, pp. 4816-4821, 2017
- 59. Yanli Huang, Beibei Xu, Xiaoliang Li\*, Properties of rational general solutions for first order multivariate autonomous rational differential systems, *Journal of Information and Computational Science* (EI), 12(6): 2197-2204, 2015.

- 60. Beibei Xu, Yanli Huang, Jinliang Wang\*, Puchong Wei, Shunyan Ren, Passivity of linearly coupled reaction-diffusion neural networks with switching topology and time-varying delay, *Neurocomputing* (SCI), 182, 274-283, 2016.
- 61. Yanli Huang\*, L. X. Châu Ngô, Franz Winkler, Rational general solutions of trivariate rational differential systems, *Mathematics in Computer Science* (Springer Basel Journal), 6(4): 361-374, 2012.
- 62. Wenjing Duan, Yanli Huang\*, Tse Chiu Wong, Predefined-time synchronization of coupled memristive competitive neural networks, *Proceedings of 2024 International Annual Conference on Complex Systems and Intelligent Science (CSIS-IAC)* (EI), Guangzhou, China, September 20-22, pp. 610-615, 2024.
- 63. Aobo Li, Yanli Huang\*, Yan Liu, Zewei Zheng, General decay anti-synchronization of coupled delayed memristive neural networks, *Proceedings of The 38th Youth Academic Annual Conference of Chinese Association of Automation (YAC 2023)* (EI), Hefei, China, August 27-29, pp. 142-147, 2023.
- 64. Xin Zhao, Yanli Huang\*, Tse Chiu Wong, General decay projective synchronization of driveresponse reaction-diffusion memristive neural networks, *Proceedings of The 13th IEEE International Conference on CYBER Technology in Automation, Control, and Intelligent Systems (IEEE-CYBER 2023)* (EI), Qinhuangdao, China, July 11-14, pp. 1253-1257, 2023.
- 65. Qing Hao, **Yanli Huang\***, Synchronization analysis and aperiodically intermittent synchronization control of multi-weighted coupled Cohen-Grossberg neural networks, *Proceedings of 2021 China Automation Congress (CAC 2021)* (**EI**), Beijing, October 22-24, pp. 3317-3322, 2021.
- 66. Limei Su, Yanli Huang\*, Jinliang Wang, Anti-synchronization of multi-weighted coupled complex-valued delayed memristive neural networks with coupling delays, *Proceedings of the first International Conference on Neuromorphic Computing (ICNC2021)* (EI), Wuhan, October 15-17, pp. 412-417, 2021.
- 67. Xin Xiao, Yanli Huang\*, Jinliang Wang, Yihao Wang, Event-triggered pinning synchronization of multi-weighted coupled neural networks without and with time delays, *Proceedings of the first International Conference on Neuromorphic Computing (ICNC2021)* (EI), Wuhan, October 15-17, pp. 418-423, 2021.
- 68. Fang Wu, **Yanli Huang\***, Robust finite-time passivity and synchronization of coupled complex-valued memristive neural networks with parameter uncertainty, *Proceedings of the 40th Chinese Control Conference* (EI), Shanghai, July 26-28, pp. 824-829, 2021.
- 69. Yihao Wang, **Yanli Huang\***, Shunyan Ren, Jianmou Lu, Dongfang Liu, Synchronization and  $H_{\infty}$  synchronization of multi-weighted coupled neural networks with event-triggered communication, *Proceedings of the 38th Chinese Control Conference*(**EI**), Guangzhou, July 27-30, pp. 912-917, 2019.
- 70. Jianmou Lu, **Yanli Huang\***, Shunyan Ren, Dongfang Liu, General decay synchronization of multi-weighted coupled reaction-diffusion neural networks with and without time-varying delays, *Proceedings of the 38th Chinese Control Conference*(**EI**), Guangzhou, July 27-30, pp. 904-909, 2019.
- 71. Jie Hou, Yanli Huang\*, Jinliang Wang, Shunyan Ren, Dongfang Liu, Anti-synchronization analysis and pinning control of coupled neural networks with multiple weights, *Proceedings* of the 8th Annual IEEE International Conference on CYBER Technology in Automation, Control, and Intelligent Systems(EI), Tianjin, July 19-23, pp. 895-900, 2018.
- 72. Shanrong Lin, **Yanli Huang\***, Jinliang Wang, Shunyan Ren, Dongfang Liu, Passivity of coupled neural networks with different dimensional nodes, *Proceedings of the 8th Annual IEEE International Conference on CYBER Technology in Automation, Control, and Intelligent Systems*(**EI**), Tianjin, July 19-23, pp. 775-780, 2018.

- 73. Weizhong Chen, Yanli Huang\*, Jinliang Wang, Shunyan Ren, Passivity and robust passivity of reaction-diffusion Cohen-Grossberg neural networks with multiple time-varying delays, Proceeding of the 29th Chinese Control and Decision Conference (EI), Chongqing, May 28-30, pp.40-45, 2017.
- 74. Shunhan Qiu, Yanli Huang\*, Jinliang Wang, Shunyan Ren, Dongfang Liu, Finite-time synchronization of coupled Cohen-Grossberg neural networks with time-varying delays, *Proceedings of the 36th Chinese Control Conference*(EI), Dalian, July 26-28, pp. 3966-3971, 2017.
- 75. Beibei Xu, Yanli Huang\*, Jinliang Wang, Puchong Wei, Shunyan Ren, Synchronization of coupled neural networks with reaction-diffusion terms and switching topology, *Proceedings of the 28th Chinese Control and Decision Conference* (EI), Yinchuan, May 28-30, pp. 5927-5932, 2016.
- 76. Shuxue Wang\*, Yanli Huang, Jinliang Wang, Meng Xu, Shunyan Ren, Pinning control strategies for synchronization of complex dynamical networks with spatial diffusion coupling, Proceedings of the 35th Chinese Control Conference (EI), Chengdu, July 27-29, pp. 3555-3560, 2016.
- 77. Shanrong Lin, Xiwei Liu, Yanli Huang\*, Event-triggered synchronization and  $H_{\infty}$  synchronization of coupled delayed reaction-diffusion memristive neural networks, *Mathematical Methods in the Applied Sciences* (SCI), 46(8): 9079-9102, 2023.
- 78. Shanrong Lin, Xiwei Liu, **Yanli Huang\***, Event-triggered passivity and synchronization of coupled reaction-diffusion neural networks with and without time-varying delay, *Transactions of the Institute of Measurement and Control* (SCI), 44(11): 2117-2140, 2022.
- 79. Shanrong Lin, Xiwei Liu\*, Yanli Huang, Event-triggered  $H_{\infty}$  synchronization of directed and switched coupled stochastic delayed neural networks with multi-weights, *IET Control Theory and Applications* (SCI), 16(10): 995-1014, 2022.
- 80. Puchong Wei, Jinliang Wang\*, Yanli Huang, Beibei Xu, Shunyan Ren, Passivity analysis of impulsive coupled reaction-diffusion neural networks with and without time-varying delay, *Neurocomputing* (SCI), 168: 13-22, 2015.
- 81. Puchong Wei, Jinliang Wang\*, **Yanli Huang**, Beibei Xu, Shunyan Ren, Impulsive control for the synchronization of coupled neural networks with reaction-diffusion terms, *Neurocomputing* (**SCI**), 207: 539-547, 2016.
- 82. Meng Xu, Jinliang Wang\*, **Yanli Huang**, Puchong Wei, Shuxue Wang, Pinning synchronization of complex dynamical networks with and without time-varying delay, *Neurocomputing* (SCI), 266: 263-273, 2017.
- 83. Zhen Qin, Jinliang Wang\*, Yanli Huang, Shunyan Ren, Synchronization and  $H_{\infty}$  synchronization of multi-weighted complex delayed dynamical networks with fixed and switching topologies, *Journal of the Franklin Institute* (SCI), 354(15): 7119-7138, 2017.
- 84. Zhen Qin, Jinliang Wang\*, Yanli Huang, Shunyan Ren, Analysis and adaptive control for robust synchronization and  $H_{\infty}$  synchronization of complex dynamical networks with multiple time-delays, *Neurocomputing* (SCI), 289: 241-251, 2018.
- 85. Xiaoxiao Zhang, Jinliang Wang\*, **Yanli Huang**, Shunyan Ren, Analysis and pinning control for passivity of multi-weighted complex dynamical networks with fixed and switching topologies, *Neurocomputing* (**SCI**), 275: 958-968, 2018.
- 86. Xiaoxiao Zhang, Jinliang Wang\*, **Yanli Huang**, Shunyan Ren, Analysis and adaptive control for synchronization and  $H_{\infty}$  synchronization of coupled partial differential systems with multiple time-varying delays, *Journal of the Franklin Institute* (**SCI**), 355: 4351-4378, 2018.
- 87. Qing Wang, Jinliang Wang\*, **Yanli Huang**, Shunyan Ren, Generalized lag synchronization of multiple weighted complex networks with and without time delay, *Journal of the Franklin Institute* (**SCI**), 355: 6597-6616, 2018.

- 88. Qing Wang, Jinliang Wang\*, Shunyan Ren, Yanli Huang, Analysis and adaptive control for lag  $H_{\infty}$  reaction-diffusion neural networks synchronization of coupled reaction-diffusion neural networks, *Neurocomputing* (SCI), 319: 144-154, 2018.
- 89. Dongyang Wang, Jinliang Wang\*, Shunyan Ren, **Yanli Huang**, Output synchronization and  $H_{\infty}$  output synchronization of complex dynamical networks with multiple derivative couplings, *Journal of the Franklin Institute* (**SCI**), 356: 407-440, 2019.
- 90. Shunyan Ren, Jigang Wu, Shuxue Wang, **Yanli Huang**, Passivity and pinning control of coupled neural networks with and without time-varying delay, *Transactions of the Institute of Measurement and Control* (**SCI**), 40(9): 2708-2717, 2018.
- 91. Puchong Wei, Jinliang Wang, **Yanli Huang**, Beibei Xu, Input and output passivity of coupled reaction-diffusion neural networks with impulsive effects, *Proceedings of the 34th Chinese Control Conference* (**EI**), Hangzhou, July 28-30, pp. 3512-3517, 2015.
- 92. Meng Xu, Jinliang Wang, **Yanli Huang**, Shuxue Wang, Shunyan Ren, Pinning synchronization of coupled neural networks with multiple time-varying delays and reaction-diffusion terms, *Proceedings of the 35th Chinese Control Conference* (**EI**), Chengdu, July 27-29, pp. 7267-7272, 2016.
- 93. Zhen Qin, Jinliang Wang\*, **Yanli Huang**, Shunyan Ren, Synchronization of multi-weighted complex dynamical networks with fixed and switching topologies, *Proceedings of the 36th Chinese Control Conference*(EI), Dalian, July 26-28, pp. 1417-1422, 2017.
- 94. Xiaoxiao Zhang\*, Jinliang Wang, **Yanli Huang**, Shunyan Ren. Passivity analysis of multiweighted complex dynamical networks with fixed and switching topologies, *Proceedings of the* 36th Chinese Control Conference (EI), Dalian, July 26-28, pp. 7695-7700, 2017.
- 95. Dongming Wang, Chenqi Mou, Xiaoliang Li, Meng Jin, Jing Yang, **Yanli Huang** (in the order of surname's strokes in Chinese). Polynomial Algebra (**Chinese book for graduate students**). *Higher Education Press*, Beijing, 2011.

## **PROJECTS**

- 1. The Royal Society International Exchanges 2022, Project No. R221201, March 2023 March 2026, £11,851.00, ongoing, Co-Applicant.
- 2. National Natural Science Foundation of China (**NSFC**), Project No.62173244, January 2022 December 2025, **RMB 754,000**, ongoing, *The First Participant*.
- 3. Natural Science Foundation of Tianjin City of China, Project No.18JCQNJC74300, April 2018 March 2021, RMB **60,000**, completed, *Principal Investigator*.
- National Natural Science Foundation of China (NSFC), Project No.11501411, January 2016
  December 2018, RMB 216,000, completed, Principal Investigator.
- National Natural Science Foundation of China (NSFC), Project No.11326211, January 2014
  December 2014, RMB 30,000, completed, Principal Investigator.
- Open Fund of Guangxi Key Laboratory of Hybrid Computation and IC Design Analysis, Project No. HCIC201704, January 2018 – December 2019, RMB 20,000, completed, Principal Investigator.
- Open Fund of Guangxi Key Laboratory of Hybrid Computation and IC Design Analysis, Project No. HCIC201302, January 2014 – July 2015, RMB 35,000, completed, Principal Investigator.
- 8. Doctoral Scientific Research Foundation of Tianjin Polytechnic University, Project No.124030274, October 2012 October 2013, RMB 20,000, completed, *Principal Investigator*.
- 9. National Natural Science Foundation of China (NSFC), Project No.61773285, January 2018
   December 2021, RMB 640,000, ongoing, The First Participant.

- National Natural Science Foundation of China (NSFC), Project No.11401018, January 2015
  December 2017, RMB 220,000, completed, The First Participant.
- 11. Natural Science Foundation of Tianjin City of China, Project No.19JCYBJC18700, April 2019 March 2022, **RMB 100,000**, ongoing, *The First Participant*.
- 12. National Natural Science Foundation of China (**NSFC**), Project No.61302127, January 2014 December 2016, RMB **240,000**, completed, *The Second Participant*.
- 13. National Natural Science Foundation of China (**NSFC**), Project No.11326198, January 2014 December 2014, RMB **30,000**, completed, *The Second Participant*.
- 14. Natural Science Foundation of Tianjin of China, Project No. 17JCYBJC15100, April 2017 March 2020, RMB **100,000**, ongoing, *The Second Participant*.
- 15. Natural Science Foundation of Tianjin of China, Project No. 15JCQNJC04100, April 2015 March 2018, RMB **60,000**, completed, *The Third Participant*.

### EXCELLENT MASTER STUDENTS

- 1. Beibei Xu
  - September, 2014 March, 2017
  - November 2016: National Scholarship for Master Graduate Students
  - June 2017: Excellent Master's Thesis of Tiangong University
- 2. Shuxue Wang
  - September, 2015 March, 2018
  - November 2017: National Scholarship for Master Graduate Students
  - June 2018: Excellent Master's Thesis of Tiangong University
  - March 2018: Outstanding graduates of Tiangong University
- 3. Weizhong Chen
  - September, 2016 March, 2019
  - November 2017: National Scholarship for Master Graduate Students
  - March 2019: Outstanding graduates of Tiangong University
- 4. Shuihan Qiu
  - September, 2016 March, 2019
  - November 2017: National Scholarship for Master Graduate Students
- 5. Jie Hou
  - September, 2017 March, 2020
  - November 2018: National Scholarship for Master Graduate Students
- 6. Jianmou Lu
  - September, 2018 - March, 2021
  - November 2020: National Scholarship for Master Graduate Students

#### ACADEMIC EXPERIENCES

#### • CONFERENCES

- 1. May 25-27, 2024, Xi'an, China, CCDC 2024 (The 36th Chinese Control and Decision Conference)
- 2. August 27-29, 2023, *Hefei*, China, **YAC 2023** (The 38th Youth Academic Annual Conference of Chinese Association of Automation)
- 3. July 11-14, 2023, *Qinghuangdao*, China, **IEEE-CYBER 2023** (The 13th IEEE International Conference on CYBER Technology in Automation, Control, and Intelligent Systems)
- 4. July 26-28, 2021, Shanghai, China: CCC 2021 (the 40th Chinese Control Conference)
- 5. September 5-7, 2019, *Lancaster*, UK: **ICAC 2019** (the 25th IEEE International Conference on Automation and Computing)
- 6. July 2, 2017, *Tianjin*, China: **TGC 2017** (4th CCF YOCSEF Tianjin Graduate Conference), chairman
- 7. July 27-29, 2016, Chengdu, China: CCC 2016 (35th Chinese Control Conference)
- 8. August 3-9, 2015, *Beijing*, China: **SSSC 2015** (4th Summer School in Symbolic Computation)
- 9. February 2-4, 2015, *Nanning*, China: **GC 2015** (International Seminar on Geometric Computation)
- 10. November 23-29, 2014, *Beijing*, China: **CDZ-CRC 2014** (CDZ Workshop GZ1115 on Computation and Reasoning with Constraints)
- 11. October 11-13, 2013, *Tianjin*, China: **NCTCS 2013** (National Conference on Theoretical Computer Science)
- 12. October 10-12, 2012, *Beijing*, China: **PAS 2012** (International Seminar on Program Verfication, Automated Debugging and Symbolic Computation)
- 13. August 17-19, 2012, *Hainan*, China: **NCTCS 2012** (National Conference on Theoretical Computer Science)
- 14. October 19-21, 2011, *Beijing*, China: **MACIS 2011** (Fourth International Conference on Mathematical Aspects of Computer and Information Sciences)
- 15. June 21-24, 2011, *Hagenberg/Linz*, Austria: **CAI 2011** (4th International Conference on Algebraic Informatics)
- 16. May 30-June 32011, *Stockholm*, Sweden: **MEGA 2011** (Effective Methods in Algebraic Geometry)
- 17. February 9-11, 2011, *Linz*, Austria: **DEAM 2** (Second Workshop on Differential Equations by Algebraic Methods)
- 18. June 28-July 9, 2010, *Hagenberg*, Austria: The **Fifth** RISC/SCIEnce Training School in Symbolic Computation
- 19. September 26-29, 2010, *Timisoara*, Romania: **SYNASC 2009** (11th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing)
- 20. August 10-16, 2009, *Chengdu*, China: **SSSC 2008** (3rd Summer School in Symbolic Computation)
- 21. May 11-13, 2009, *Beijing*, China: **ICMM 2009** (International Conference on Mathematics Mechanization In honor of Prof.Wen-Tsun Wu's ninetieth birthday)
- 22. April 28-30, 2008, *Beijing*, China: **SCC 2008** (First International Conference on Symbolic Computation and Cryptography)

- 23. April 25-27, 2008, *Beijing*, China: **Chinese-SALSA 2008** (The Second Chinese-SALSA Workshop: France/China Workshop on Solvers for Algebraic Systems and Applications)
- 24. April 3-5, 2008, *Shanghai*, China: **SRATC 2008** (International Workshop on Symbolic Real Algebra and Trustworthy Computing)

## • TALKS

- 1. Predefined-Time Synchronization of Coupled Different Dimensional Neural Networks, University of Strathclyde, Glasgow, UK, August 20, 2024
- 2. Robust Passivity of Coupled Cohen-Grossberg Neural Networks with Reaction-Diffusion Terms, ICAC 2019, Lancaster, UK, September 5-7, 2019
- Rational General Solutions of Higher Order Algebraic ODEs, CDZ-CRC 2014, Beijing, China, November 28, 2014
- 4. Classification of Higher Order AODEs with respect to Rational Solvability. NCTCS 2012, Hainan, China, August 19, 2012
- 5. Rational General Solutions of Trivariate Rational Systems of Autonomous ODEs. MACIS **2011**, Beijing, China, October 19, 2011
- 6. Rational General Solutions of First-Order Algebraic ODEs. **DK-Hearing**, Vienna, Austria, May 23, 2011
- 7. Parametric Loci of Intersection and Self-intersection for Parametrized Surfaces. RISC Forum, Hagenberg, Austria, April 4, 2011
- 8. Rational General Solutions of High Order Non-autonomous ODEs. RISC CA Seminar, Hagenberg, Austria, October 14, 2010
- 9. Parametric Loci of Self-intersection for Surfaces. SYNASC 2009, Timisoara, Romania, September 26, 2009.

# **HONORS**

- April 2023: The Outstanding Class Instructor of Tiangong University during 2022
- March 2023: Tianjin Excellent Master's Thesis Advisor during 2022
- June 2021: **Member** of the 4th China Mathematical Society Computer Mathematics Professional Committee
- May 2020: Excellent Undergraduate's Thesis Advisor of Tiangong University
- June 2018: Excellent Master's Thesis Advisor of Tiangong University
- July 2017: The excellent conference paper of the 4th CCF YOCSEF Tianjin Graduate Conference, CCF YOCSEF Tianjin
- October 2016: Member of the 3rd China Mathematical Society Computer Mathematics Professional Committee
- November 2015: **The Third Level candidate** of Tianjin "131" Innovative Talent Training Project
- May 2012: The Best Academic Paper Award of Beihang University
- October 2010 September 2011: Postgraduate Program Scholarship of **High-level Government-sponsored Overseas Study**
- January 2010: Top 10 Graduate Students of School of Mathematics and Systems Science
- December 2009: **GUANGHUA** Scholarship