

Curriculum Vitae

First name: Xinxin

Family name: HAN

Gender: Female

Date of Birth: October 29, 1994

Telephone: +86 17852636790

Email: hitwhhxx@163.com

Address: Department of Mathematics, Harbin Institute of Technology at Weihai, Weihai, 264209, Shandong Province, China

RESEARCH INTERESTS

- Boundary control for stochastic reaction-diffusion systems
- Asynchronous control for Markov switching systems
- Stability and stabilization for delay differential systems
- Synchronization of complex networks

EDUCATIONAL BACKGROUNDS

- **University:** Harbin Institute of Technology Sep. 2019—Until now
Degree: Ph.D.
College: School of Mathematics
Specialty: Mathematics
Research Field: Boundary control for Markovian reaction-diffusion systems
Adviser: Kaining Wu
- **University:** Harbin Institute of Technology Sep. 2017—Jun. 2019
Degree: Master
College: Department of Mathematics, College of Science
Specialty: Computational Mathematics
Research Field: Boundary control for stochastic delay reaction-diffusion systems
Adviser: Kaining Wu
- **University:** Qufu Normal University Sep. 2013—Jun. 2017
Degree: Bachelor
College: School of Mathematics
Specialty: Statistics

AWARDS & HONORS

- Nov. 2016, The third prize of the 8th Mathematics competition of Chinese College Students (Mathematics Major)
- Dec. 2016, The second prize of the 7th Mathematics competition of College Students in Shandong Province (Mathematics Major)
- Apr. 2017, Outstanding Graduate of Shandong Province
- Sep. 2017, First-class Academic Scholarship for Postgraduate of Harbin Institute of Technology
- Dec. 2017, First-class Special Scholarship for Postgraduate of Harbin Institute of Technology

- Sep. 2018, First-class Academic Scholarship for Postgraduate of Harbin Institute of Technology
- Jul. 2021, China Scholarship for joint PhD students (CSC)
- Sep. 2021, The third prize of the 15th Natural Science Outstanding Academic Achievement Award in Weihai city
- Dec. 2021, Outstanding Student (Practical Learning Award) of Harbin Institute of Technology

RESEARCH ACHIEVEMENTS

- **Xin-Xin Han**, Kai-Ning Wu, Yugang Niu, Asynchronous Boundary Control of Markov Jump Neural Networks With Diffusion Terms, IEEE transactions on cybernetics, DOI: 10.1109/TCYB.2022.3151709
- **Xin-Xin Han**, Kai-Ning Wu, Yu Yao, Asynchronous boundary stabilization for T-S fuzzy Markov jump delay reaction-diffusion neural networks, Journal of the Franklin Institute, <https://doi.org/10.1016/j.jfranklin.2022.03.002>
- **Xin-Xin Han**, Kai-Ning Wu*, Yugang Niu, Asynchronous Boundary Stabilization of Stochastic Markov Jump Reaction-Diffusion Systems, IEEE Transactions on Systems, Man, and Cybernetics: Systems, DOI: 10.1109/TSMC.2021.3130271
- **Xinxin Han**, Kaining Wu, Xiaohua Ding, Baoqing Yang. Boundary control of stochastic reaction-diffusion systems with Markovian switching[J]. International Journal of Robust and Nonlinear Control, 2020, 30 (10): 4129-4148. (IF:3.503)
- **Xinxin Han**, Kaining Wu, Xiaohua Ding. Finite-time stabilization for stochastic reaction-diffusion systems with Markovian switching via boundary control[J]. Applied Mathematics and Computation, 2020, 385:125422. (IF:3.472)
- Kaining Wu, **Xinxin Han**, Weihai Zhang. Stabilisation of stochastic delay Markovian reaction-diffusion systems via boundary control[J]. IET Control Theory and Applications, 2019, 13(15): 2436-2446. (IF:3.343)
- **Xinxin Han**, Haiyan Yu, Kaining Wu. Finite-time synchronisation control of coupled reaction-diffusion systems[J]. International Journal of Systems science, 2019, 50(15): 2838-2852. (IF:2.149)
- **Xinxin Han**, Kaining Wu. H-infinity boundary control for stochastic delay reaction-diffusion systems with Markovian switching[C]. The 13th International Conference on Innovative Computing, Information and Control (ICICIC2018)
- **Xinxin Han**, Kaining Wu, Mengzhen Ren. Boundary-output-based asynchronous stabilization for stochastic Markovian reaction-diffusion systems[C]. The 36th Youth Academic Annual Conference of Chinese Association of Automation (YAC2021)

ACADEMIC ACTIVITIES

- The 37th China Control Conference (CCC2018) July 25-27, 2018, Wuhan, China
Post paper: H-infinity control of linear stochastic reaction-diffusion system with Markovian switching
- The 13th International Conference on Innovative Computing, Information and Control (ICICIC2018) August 20-23, 2018, Lianyungang, China
Report paper: H-infinity boundary control for stochastic delay reaction-diffusion systems

with Markovian switching

- 2020 TCCT Stochastic System and Control Conference (TCCT 翻译待定)

October 23-25, 2020, Liaocheng, China

Report paper: Dissipativity-based asynchronous boundary stabilization of stochastic Markov jump reaction-diffusion systems

- The 36th Youth Academic Annual Conference of Chinese Association of Automation (YAC2021)

May 28-30, 2021, Nanchang,

China

Report paper: Boundary-output-based asynchronous stabilization for stochastic Markovian reaction-diffusion systems

PROJECT EXPERIENCE

- Participate in the National Natural Science Foundations of Shandong Province under Grant ZR2018MF018
- Participate in the National Natural Science Foundations of Shandong Province under Grant ZR2021MF007 (As the first-ranked project team member)