

Curriculum Vitae



Xiao Long Xin
School of Mathematics
Northwest University
Xi'an, Shaanxi Province, China
E-mail: xlxin@nwu.edu.cn
Mobile: 08613571952880

Personal Information

- Name in full: Xiao Long Xin
- Nationality: China
- Date of Birth: July 25, 1955
- Position: Professor
- Address: School of Mathematics, Northwest University, Xi'an, Shaanxi Province, 710127, China.
- Email: xlxin@nwu.edu.cn, xlxinx@126.com.

Research Interests:

- 📖 Algebraic hyperstructure theory,
- 📖 Logic algebras (BL-,BCI-,BCK-,EQ-algebras) and their applications,
- 📖 Fuzzy set theory and fuzzy logics.

Brief Biography

Xiao Long Xin is a mathematical profession of the school of mathematics, Northwest University, China. He received the Ph.D. degree in mathematics from Gyeongsang National University, Korea in 1999. His major research interests lie in the areas of logical algebras and their applications, algebraic hyperstructure theory, fuzzy sets, fuzzy logic. He has published more than 140 papers, where 50 papers was indexed by SCI. Now, he has implemented 2 projects from National Natural Science Foundation. In 2013, He has presided over the completion of the research results "some logical algebra and fuzzy research" and got the second prize of Shaanxi province science and technology award.

Education and Academic Career

1. B.S., Department of Mathematics, Northwest University, in China (1978-1982)
2. M.S., Department of Mathematics, Northwest University, in China (1985-1988)
3. Ph.D., College of science, Gyeongsang National University, Korea(1997-1999)
4. Associate Professor, Northwest University, China (1993-2001)
5. Professor of Mathematics, Northwest University, China (2001-present)
6. Doctoral supervisor, Northwest University, China (2005-present)

Editorial Board Member

1. Editorial Board Member, The Scientific World Journal
2. Editorial Board Member, Chinese Journal of Mathematics
3. Editorial Board Member, Journal of pure and applied mathematics (China)
4. Editorial Board Member, Operations Research and Fuzziology(China)

Teaching Experience

Professor Xin has already tutored 50 post-graduate master students and 13 doctoral students.

Publication of papers

[1] **Xiaolong Xin**, Residuated EQ-algebras may not be residuated lattices, Fuzzy Sets and Systems, accepted.(文章网址 <https://doi.org/10.1016/j.fss.2019.04.012>)

[2] **Xiaolong Xin**, Madad Khan, Young Bae Jun, Generalized states on EQ-algebras, Iranian Journal of Fuzzy Systems, 2019, 16(1): 159-172.

[3] **Xiaolong Xin**, Yulong Fu, Yanyan Lai, Juntao Wang, Monadic pseudo BCI-algebras and corresponding logics, Soft Computing , 2019, 23:1499–1510.

[4] **Xiaolong Xin**, Rajab Ali Borzooei, Mahmood Bakhshi, Young Bae Jun, Intuitionistic Fuzzy Soft Hyper BCK Algebras, Symmetry 2019, 11, 399, Doi:10.3390/sym11030399.

[5] Yanyan Dong, **Xiaolong Xin**, alpha -filters and prime alpha-filter spaces in residuated lattices, Soft computing, 2019, 23: 3207-3216.

- [6] Xin Xun and Xiao Long Xin, Nodal filters and seminodes in equality algebras, *Journal of Intelligent and Fuzzy Systems*, 2019, 37:1457-1466.
- [7] Xiaoyun Cheng, Xiaolong Xin, Arsham Borumand Saeid and Xiaoli He, Co-annihilators and fuzzy co-annihilators in EQ-algebras, *Journal of Intelligent and Fuzzy Systems*, 2019, 37:5471-5485.
- [8] M. Aaly Kologani, Y.B. Jun, X.L. Xin, E.H. Roh, R.A. Borzooei, On co-annihilators in hoops, *Journal of Intelligent & Fuzzy Systems* 37 (2019) 5471–5485.
- [9] **Xin Xiao Long**, Zou Xi Yu, Zhan Jian Ming, Hyper BL-algebras, *Filomat*, 32(19), 2018: 6675-6689.
- [10] Wei Wang, **Xiao Long Xin**, Jun Tao Wang, EQ-algebras with internal states, *Soft Comput*, (2018) 22: 2825-2841.
- [11] Xiao Yun Cheng, **Xiao Long Xin**, Peng Fei He, Generalized state maps and states on pseudo equality algebras, *Open Math*, (2018) 16: 133-148.
- [12] Jun Tao Wang, **Xiao Long Xin**, Peng Fei He, Monadic bounded hoops, *Soft Comput*, (2018) 22: 1749-1762.
- [13] Mei Wang, **Xiao Long Xin**, Jun Tao Wang, Integral hoops and integral filters, *Journal of Intelligent & Fuzzy Systems*, (2018) 35: 1055-1062.
- [14] Jie Liang, **Xiao Long Xin**, Jun Tao Wang, On derivations of EQ-algebras, *Journal of Intelligent & Fuzzy Systems*, (2018) 35: 5573-5583.
- [15] Xiao Ye Yu, **Xiao Long Xin**, Jun Tao Wang, Fuzzy filters on equality algebras with applications, *Journal of Intelligent & Fuzzy Systems*, (2018) 35: 3709-3719.
- [16] Mei Wang, **Xiao Long Xin**, Jun Tao Wang, Implicative pseudo valuations on hoops, *Chin. Quart. J. of Math*, (2018) 33(1): 51-60.
- [17] Jiang Yang, Xiao Long Xin, Peng Fei He, Notes on topological BL-algebras, *Fuzzy Sets and Systems*, (2018) 350: 33-40.
- [18] Bin Zhao, Peng Fei He, On non-commutative residuated lattices with internal states, *IEEE Transactions on fuzzy systems*, (2018) 26(3): 1387-1400.
- [19] Jiang Yang, Xiao Long Xin, Peng Fei He, On topological EQ-algebras, *Iranian Journal of Fuzzy Systems*, (2018) 16(6): 145-158.
- [20] **Xiao Long Xin**, Yu Long Fu, Lattices and block codes, *UPB Scientific Bulletin, Series A: Applied Mathematics and Physics*, 2017, 79(3):11-18.

- [21] Wei Wang, **Xiao Long Xin**, Jun Tao Wang, EQ-algebras with internal states, *Soft Comput*, 2017, DOI 10.1007/s00500-017-2754-9.
- [22] Peng Fei He, Bin Zhao, **Xiao Long Xin**, States and internal states on semihoops, *Soft Comput*, 2017, 21(11) : 2941-2957.
- [23] **Xiao Long Xin**, Xiao Yun Cheng, Xiao Hong Zhang, Generalized state operators on BCI-algebras, *Journal of Intelligent & Fuzzy Systems*, 2017, 32(3) : 2591-2602.
- [24] Jun Tao Wang, **Xiao Long Xin**, Young Bae Jun, Very true operators on equality algebras, *J. Computational Analysis and Applications*, 2018, 24(3).
- [25] Yu Long Fu, Zheng Yan, Hui Li, **Xiao Long Xin**, A secure SDN based multi-RANs architecture for future 5G networks, *Computers & Security*, 2017, 70: 648-662.
- [26] Jiang Yang, **Xiao Long Xin**, Peng Fei He, Uniform topology on EQ -algebras, *Open Math.*, 2017, 15: 354 - 364.
- [27] Jun Tao Wang, **Xiao Long Xin**, Peng Fei He, Monadic bounded hoops, *Soft Comput*, 2017, DOI 10.1007/s00500-017-2754-x.
- [28] **Xiao Long Xin**, Yi Jun Li, Yu Long Fu, States on pseudo-BCI algebras, *European Journal of Pure and Applied Mathematics*, 2017, 10(3): 455-472. (ESCI) (已录)
- [29] **Xiao Long Xin**, Young Bae Jun, Positive implicative energetic subsets of BCK-algebras, *Italian Journal of Pure and Applied Mathematics*, 2017, 38: 607-614. (已录)
- [30] Cheng Fang Luo, **Xiao Long Xin**, Peng Fei He, N-fold (positive) implicative filters of of hoops, *Italian Journal of Pure and Applied Mathematics*, 2017, 38: 631-642. (已录)
- [31] Peng Fei He, **Xiao Long Xin**, Jian Ming Zhan, On derivations and their fixed point sets in residuated lattices, *Fuzzy Sets and Systems* 303 (2016) 97–113.
- [32] **Xiao Long Xin**, Peng Fei He, Yu Long Fu, States on hyper MV-algebras, *Journal of Intelligent & Fuzzy Systems* 31 (2016) 1299–1309.
- [33] Xiu Juan Hua, **Xiao Long Xin**, Rough soft lattices and generalized fuzzy soft lattices, *Journal of Intelligent & Fuzzy Systems* 31 (2016) 479–485.
- [34] Yu Xi Zou, **Xiao Long Xin**, Peng Fei He, On annihilators in BL-algebras, *Open Math.* 2016; 14: 324–337.
- [35] Jun Tao Wang, **Xiao Long Xin**, and Arsham Borumand Saeid, Very true operators on MTL-algebras, *Open Math.* 2016; 14: 1–15.

- [36] Xiao Yun Cheng, **Xiao Long Xin**, Young Bae Jun, Hyper Equality Algebras, Springer International Publishing Switzerland 2017, T.-H. Fan et al. (eds.), Quantitative Logic and Soft Computing 2016, Advances in Intelligent Systems and Computing 510, DOI 10.1007/978-3-319-46206-6_40.
- [37] Yu Xi Zou, **Xiao Long Xin**, Young Bae Jun, On Generalized Annihilators in BL-Algebras, Springer International Publishing Switzerland 2017, T.-H. Fan et al. (eds.), Quantitative Logic and Soft Computing 2016, Advances in Intelligent Systems and Computing 510, DOI 10.1007/978-3-319-46206-6_40.
- [38] Xiao Hong Zhang, Zhen Yu Chen, **Xiao Long Xin**, Smart Semihypergroups and Rough Sets based on General Binary Relations, 2016 12th International Conference on Natural Computation, Fuzzy Systems and Knowledge Discovery (ICNC-FSKD).
- [39] **Xiao Long Xin**, Jun Tao Wang, Xiao Hong Zhang, Generalized lower and upper Approximations in hyperrings, Journal of Intelligent & Fuzzy Systems 31 (2016) 2881–2886.
- [40] Xiao Yun Cheng, **Xiao Long Xin**, FILTER THEORY ON HYPER BE-ALGEBRAS, Italian journal of pure and applied mathematics, 35(2015) 509-526.
- [41] **Xiao Long Xin**, Bijan Davvaz, State operators and state-morphism operators on hyper BCK-algebras, Journal of Intelligent & Fuzzy Systems, 2015, 29:1869-1880.
- [42] **Xiao Long Xin**, Pei Fei He, Yong Wei Yang, Fuzzy soft hyperideals in hyperlattices , U.P.B. Sci. Bull., Series A, 2015, 77:173-184
- [43] Peng Fei He, **Xiao Long Xin**, Yong Wei Yang, On state residuated lattices, Soft Comput , 2015, 19:2083–2094
- [44] Meng Biao Long, **Xin Xiao Long**, Generalized co-annihilator of BL-algebras , OPEN MATHEMATICS, 2015, 13, 1-10.
- [45] **Xiao Long Xin**, Hua Xiu Juan, Zhu Xi, Roughness in Lattice Ordered Effect Algebras, The Scientific World Journal, vol.2014 ID 542846, 9pages, 2014..
- [46] **Xiao Long Xin**, Pu Wang, States and measures on hyper BCK-algebras, Journal of Applied Mathematics, vol.2014, Article ID 397265, 7 pages, 2014.
- [47] **Xiao Long Xin**, Yu Long Fu, Some results of convex fuzzy sublattices, Journal of Intelligent & Fuzzy Systems, 2014, 27(1):287-298.

[48] **Xiao Long Xin**, Peng Fei He, Yong Wei Yang, Characterizations of some fuzzy prefilters (filters) in EQ-algebras, The Scientific World Journal, vol.2014, Article ID 829527, 12 pages, 2014.

[49] **Xiao Long Xin**, Wen Ting Li, Soft congruence relations over rings, The Scientific World Journal, vol. 2014, Article ID 541630, 9 pages, 2014.

[50] Peng Fei He, **Xiao Long Xin**, Jian Ming Zhan, On rough hyperideals in hyperlattices, Journal of Applied Mathematics, Volume 2013, Article ID 915217, 10 pages.

[51] Yong Wei Yang, **Xiao Long Xin**, Peng Fei He, Applications of soft union Sets in the ring theory, Journal of Applied Mathematics, vol. 2013, Article ID 757382, 12 pages.

[52] **Xiao Long Xin**. The fixed set of a derivation in lattices. Fixed Point Theory and Applications, 2012, 2012(1): 1-12.

[53] Peng Fei He, **Xiao Long Xin**, Fuzzy hyperlattices, Computers and Mathematics with Applications, 2011, 62(12):4682-4690.

[54] Wei Wang, **Xiao Long Xin**, On fuzzy filters of pseudo BL-algebras, Fuzzy Sets and Systems, 2011, 162(1): 27-38.

[55] Xiu Juan Hua, **Xiao Long Xin**, Generalized (convex) fuzzy sublattices, Computers and Mathematics with Applications, 2011, 62(2): 699-708.

[56] Wei Ji, **Xiao Long Xin**, Torsion elements in effect algebras, Soft Computing, 2011, 15(12): 2501-2505.

[57] **Xiao Long Xin**, Ti Yao Li, Jing Hua Lu, On derivations of lattice, Information sciences, 2008, 178(2): 307-316.

Totals: more than 150 published

Foundations

- National Natural Science Foundation of China: Peodu EQ-algebras and the existences and Presentations of ttates on peodu EQ-algebras, 2020-2023.
- National Natural Science Foundation of China: States and internal state on EQ-algebras and its related algebraic structures, 2016-2020.

- National Natural Science Foundation of China: The uncertainty of two types of Hyper logic algebra, 2015-2018.
- Specialized research fund project in Shaanxi province department of education: The lattices theory and its application in information science, 2009-2010.
- Natural Science Foundation of Shaanxi province: Differential system on lattice, hyper algebra system and fuzzy system project Research and application, 2007-2009.