Curriculum Vitae

Personal Information

Name: Liangyun Zhang   Gender: Male

Academic Title: Professor   Birthplace: Feidong

Major: Mathematics   Highest Education: Ph.D.

Research: Hopf Algebra; Bioinformatics

Graduate School: Nanjing University

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Education

1984-1988: Bachelor, Math Department, Anhui Normal University.

1992-1995：Master, Math Department, Fudan University.

2000-2002：Ph.D., Math Department, Nanjing University.

2004-2006：Postdoc, Math Department, Nanjing University.

Honors and Awards

1. Topic Editor of the journal "Mathematics", 2021.
2. Outstanding Individual at Nanjing Agricultural University, 2020.
3. Invited to attend and participate in the 8th World Congress of Chinese Mathematicians, 2019.
4. Awarded "Excellent Teacher" Title of Nanjing Agricultural University, 2013-2015.
5. The thesis "The Structure of Hom-Lie Bialgebra", won the Grand Prize in the final of the 5th Nanjing Agricultural University Science and Technology Festival, 2011.
6. Editor-in-Chief of the "Linear Algebra" textbook, won Jiangsu Excellent Textbook Award, 2011.
7. "The teaching innovation of courses of mathematics in agricultural colleges", won the first prize of teaching achievements of Nanjing Agricultural University (ranked first), 2011.
8. Editor-in-chief of the textbook "Advanced Mathematics", won the "Twelfth Five-Year Plan" and "Thirteenth Five-Year Plan" textbooks of the Ministry of Agriculture, 2010-2020.
9. Editor-in-chief of the "Linear Algebra" textbook, won the national "Tenth Five-Year Plan" and "Eleventh Five-Year Plan" textbook, 2000-2010.
10. The first and second session of "133 outstanding academic leaders of young teachers" of Nanjing Agricultural University.

11. The first batch of young and middle-aged science and technology leaders in the "333 High-level Talent Cultivation Project" of Jiangsu Province, 2007.

12. "Standardized Research and Innovation of Mathematics Teaching System in Higher Agricultural and Forestry Colleges", won the second prize of Jiangsu Province Teaching Achievement (ranked first), 2007.

13. "Construction and Practice of Mathematics Series Courses in Agricultural University", won the second prize of Jiangsu Province Teaching Achievement (ranked second), 2004.

Projects and Papers

I. Projects

1. Math Education Projects

1. Principal Investigator of the teaching reform project of "Advanced Mathematics" (economic management) courses by China Agriculture Press, 2020.

2. Participate in the project of Jiangsu Province Educational Reform, "The Internationalization of Talent Cultivation in Different Universities and University Mathematics Curriculum Innovation and Practice under the Concept of STEM", 2020-2022.

3. Principal Investigator of the China Agricultural Science and Education Foundation "Exploration and Practice of Improving the Teaching Quality of Course Linear Algebra in Higher Agricultural Colleges" Educational Reform Project (NKJ201502031), 2016-2018.

4. Principal Investigator of the teaching reform project of Jiangsu Province's textbook "Linear Algebra", 2014-2017.

5. Principal Investigator of the Ministry of Education's "Research and Practice of Mathematics Teaching Standards in Agricultural and Forestry Colleges in the New Century" Educational Reform Project (2007-30), 2007-2011.

6. Principal Investigator of the teaching reform project of "Linear Algebra Project Establishment Excellent Textbook" of Jiangsu Education Department, 2005-2008

2. Research Projects

7. Principal Investigator of "Research on Galois Theory and Cohomology Theory on Weak Multipliers (Hom-) Hopf Algebras", National Natural Science Foundation of China, 2016-2019.

8. Principal Investigator of "Study on the Structure and Representation of Weak Hopf Algebra and Cohomology Dimension", Project of Jiangsu Natural Science Foundation, 2014-2017.

9. Principal Investigator of the "Study on the Structure of Weakly Correlated Hopf Modules and Their Automorphic Algebras", Education Doctoral Program Fund Project, 2011-2013.

10. Participate in "Algebraic Representation Theory and String Theory", National Natural Science Foundation of China, 2009-2011.

11. Principal Investigator of the "Research on the Structure of (Co)Modular Algebra and Doi-Hopf Module on Weak Hopf Algebra", Science and Technology Project of the Ministry of Education, 2008-2015.

12. Principal Investigator of "Hopf Algebra and Quantum Group Research", Postdoctoral Science Foundation of China, 2005-2006.

II. Selected Papers

[1] Zheng Huihui, Guo Li and Zhang Liangyun*. Rota-Baxter paired modules and their constructions from Hopf algebras, **Journal of Algebra**，2020，559: 601-624

[2] Chen Yuanyuan，Zheng Huihui and Zhang Liangyun*. Double Hom-associative algebra and double Hom-Lie bialgebra. **Advances in Applied Clifford Algebras**. 2020，30：8

[3] Chen Yuanyuan, Wang Zhongwei and Zhang Liangyun*. FS-coalgebras and crossed coproducts，**Georgian Mathematical Journal**，2019, 26（3）: 381-392

[4] Zhongwei Wang, Liangyun Zhang* and Huihui Zheng. Equivalent crossed products of monoidal Hom-Hopf algebras, **Glasnik Matematicki**, 2019, 54(4): 345-367

[5] Wang Zhongwei,Chen Yuanyuan and Zhang Liangyun*. Separable extensions for crossed products over monoidal Hom-Hopf algebras. **Journal of Algebra and Its Applications**.   2018, 17(9): 1850161

[6] Zhongwei Wang, Cong Chen and Liangyun Zhang*. Morita Equivalence for weak Hopf-Galois Extensions, **Communications in Algebra**，2017, 45(1):162-182

[7] Yuanyuan Chen, Liangyun Zhang**. The structure and construction of Bi-Frobenius Hom-algebras, **Communications in Algebra,** 2017, 45(5): 2142-2162

[8] Yuanyuan Chen and Liangyun Zhang*. Hopf-Galois extensions for monoidal Hom-Hopf algebras, **Colloquium Mathematicum**, 2016, 143: 127-147

[9] Zhongwei Wang and Liangyun Zhang*. The duality theorem for twised smash products of Hopf algebras and its applications，**Colloquium Mathematicum**, 2015, 141(1): 25-44

[10] Yuanyuan Chen and Liangyun Zhang*. The category of Yetter-Drinfel'd Hom-modules and the quantum Hom-Yang-Baxter equations, **Journal of Mathematical Physics**, 2014, 55(4): 031702

[11] Zhongwei Wang, Yuanyuan Chen and Liangyun Zhang*. Total Integral for Weak Hopf Algebras, **Algebras and Representation Theory**, 2013, 16(4): 941-953

[12] Yuanyuan Chen, Zhongwei Wang and Liangyun Zhang*. Integrals for Hom-Hopf algebras and its applications, **Journal of Mathematical Physics**, 2013, 54(7): 073515

[13] Gabriella Böhm, Yuanyuan Chen and Liangyun Zhang. On Hopf monoids in duoidal categories, **Journal of Algebra**, 394, 2013: 139-172

[14] Peng Zhang, Qiang Li and Liangyun Zhang*. The global dimension of L-R twisted smash products，**Siberian Mathematical Journal**, 2013, 54(5): 951-958

[15] Yong Wang and Liangyun Zhang*. The structure theorem and duality theorem for endomorphism algebras of weak Hopf algebras，**Journal of Pure and Applied Algebra**, 2011, 215(6): 1133-1145

[16] Yong Wang and Liangyun Zhang*. The structure theorem for comodule algebras over Hopf algebroids, **Acta Mathematica Hungarica**，2011，132(1): 49-62

[17] Liangyun Zhang*. Maschke-type theorem and Morita context over weak Hopf algebras, **Science in China**, 49(5): 587-598，2006

[18] Zutan Li, Hangjin Jiang, Lingpeng Kong, Yuanyuan Chen, Liangyun Zhang* and Cong Pian*. Deep6mA: a deep learning framework for exploring similar patterns in DNA N6-methyladenine sites across different species. PLoS Computational Biology, 2021，17(2): e1008767

[19] Lingpeng Kong†, Yuanyuan Chen†, Fengjiao Xu, Mingmin Xu, Zutan Li, Jingya Fang, Liangyun Zhang*, Cong Pian*. Mining influential genes based on deep learning, **BMC Bioinformatics,** 2021, 22: 27

[20] Yuanyuan Chen , Fangjiao Xu , Cong Pian , Minmin Xu, Lingpeng Kong, Jingya Fang, Zutan Li, Liangyun Zhang*. EpiMOGA: an epistasis detection method based on a multi-objective genetic algorithm. **Genes**, 2021, 12, 191

[21] Jingya Fang†, Cong Pian†, Mingmin Xu, Lingpeng Kong, Zutan Li, Jin wen Ji, Liangyun Zhang*, Yuanyuan Chen* . Revealing prognosis-related pathways at the individual level by a comprehensive analysis of different cancer transcription data. **Genes,** 2020, 11 (11), 1281

[22] Xiaoyu Zhao, Jin Zhang, Yuanyuan Chen, Qiang Li, Tao Yang, Cong Pian and Liangyun Zhang*. Promoter Recognition Based on the Maximum Entropy Hidden Markov Model, **Computers in Biology and Medicine**, 2014, 51:74-81