

Public Curriculum Vitae

Yi Zhang

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Education History

- February 15th, 2017 Ph.D. in Mathematics with distinction, [Institute for Algebra](#), [Johannes Kepler University Linz](#), Austria. Dissertation Title: *Univariate Contraction and Multivariate Desingularization of Ore Ideals*.
- July 3rd, 2016 Ph.D. in Applied Mathematics, [Key Laboratory of Mathematics Mechanization](#), [Academy of Mathematics and Systems Science](#), [University of Academy of Sciences](#), Beijing, China. Dissertation Title: *Algorithms for Contraction of Linear Differential and Difference Operators*.
- June 30th, 2011 B.Sc. in Mathematics, [School of Mathematical Sciences](#), [Soochow University](#), Suzhou, China.

Teaching Experience

- 09/2010 – 10/2010 Teaching internship in Xi'an Jiaotong-Liverpool University Affiliated School, Suzhou, China.

Significant Professional Publications

1. N. Thieu Vo and Yi Zhang. *Rational Solutions of High-Order Algebraic Ordinary Differential Equations*, 2018, arXiv:[1709.04174](#), accepted by Journal of Systems Sciences and Complexity.
2. Ting Guo, Christian Krattenthaler and Yi Zhang. *On (shape-)Wilf-equivalence for words*, 2018. *Advances in Applied Mathematics*, 100, pp. 87-100, 2018. DOI:[10.1016/j.aam.2018.05.006](#), arXiv:[1802.09856](#).
3. Christoph Koutschan and Yi Zhang. *Desingularization in the q -Weyl Algebra*. *Advances in Applied Mathematics*, 97, pp. 80–101, 2018. DOI: [10.1016/j.aam.2018.02.005](#), arXiv:[1801.04160](#).

4. Shaoshi Chen, Manuel Kauers, Ziming Li and Yi Zhang. *Apparent Singularities of D-finite Systems*, 2017. arXiv:[1705.00838](#), accepted by Journal of Symbolic Computation.
5. Yi Zhang. *Contraction of Ore Ideals with Applications*. In *Proceedings of the 2016 International Symposium on Symbolic and Algebraic Computation*, pp. 413-420, ACM Press, 2016. DOI:[10.1145/2930889.2930890](#). [[Distinguished Student Author Award](#)]

Professional Experience

- 09/2018 – Research Associate, [Department of Mathematical Sciences, The University of Texas at Dallas](#), U.S. (Advisor: Prof. [Carlos E. Arreche](#))
- 03/2017 – 08/2018 Postdoc researcher, [Johann Radon Institute for Computational and Applied Mathematics \(RICAM\)](#), [Austrian Academy of Sciences](#), Austria. (Advisor: Dr. [Christoph Koutschan](#))

Research Interests

Symbolic Computation, Computer Algebra, Computational Algebraic Geometry, Algorithmic Combinatorics, Algebraic Theory of Differential and Difference Equations

Professional Memberships

- reviewer for Mathematical Reviews

Awards

- 07/2016 [ISSAC'16 Distinguished Student Author Award](#), SIGSAM, Association for Computing Machinery.
- 09/2009 – 07/2010 The Second Prize Scholarship of Soochow University, Suzhou, China.
- 09/2008 – 07/2009 The First Prize Scholarship of Soochow University, Suzhou, China.
- 09/2007 – 07/2008 The First Prize Scholarship of Soochow University, Suzhou, China.
- 09/2007 – 07/2008 The Zhu Jingwen Scholarship of Soochow University, Suzhou, China.
- 09/2007 – 07/2008 The Merit Student of Soochow University, Suzhou, China.