

Curriculum Vitae

Personal Data

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| Full name | Yi Zhang |
| Date of birth | 12.12.1988 |
| Place of birth | Changzhou, Jiangsu Province, China |
| Nationality | Chinese |
| Marital Status | Single |



Contact

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| E-mail | zhangy@amss.ac.cn |
| Address | Johann Radon Institute for Computational and Applied Mathematics (RICAM) Austrian Academy of Sciences Altenbergerstraße 69, A-4040 Linz, Austria |
| Office | S2 0435 (Science Park II) |
| Phone | +43 732 2468 5235 |
| Homepage | https://yzhang1616.github.io/ |

Education

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| 09/2013 – 02/2017 | Ph.D. in Mathematics with distinction, Institute for Algebra , Johannes Kepler University Linz , Austria. (Co-supervisors: Prof. Manuel Kauers and Prof. Ziming Li) |
| 09/2011 – 07/2016 | Ph.D. in Applied Mathematics, Key Laboratory of Mathematics Mechanization , Academy of Mathematics and Systems Science , University of Academy of Sciences , Beijing, China. (Co-supervisors: Prof. Manuel Kauers and Prof. Ziming Li) |

09/2007 – 07/2011 B.Sc. in Mathematics, [School of Mathematical Sciences, Soochow University](#), Suzhou, China.

I also studied as a Ph.D. student in [Research Institute for Symbolic Computation](#), Johannes Kepler University Linz from 09/2013 to 06/2015 under the supervision of Prof. Manuel Kauers.

Work Experience

03/2017 – 02/2018 Postdoc researcher, [Johann Radon Institute for Computational and Applied Mathematics \(RICAM\)](#), [Austrian Academy of Sciences](#). (Supervisor: Dr. [Christoph Koutschan](#))

Visiting Experience

May 2017 Visiting scholar, [Department of Mathematics](#), [Kobe University](#), Japan. (Host researcher: Prof. [Nobuki Takayama](#))

Awards

07/2016 [ACM Distinguished Student Author Award at ISSAC'16](#), 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.

Research Interests

Computer Algebra, Computational Algebraic Geometry, Ore Algebras, Gröbner Bases, Algorithmic Combinatorics and Experimental Mathematics

PhD Thesis

- Yi Zhang. *Univariate Contraction and Multivariate Desingularization of Ore Ideals*. PhD thesis, Institute for Algebra, Johannes Kepler University Linz, 2017.

Publication

- 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](https://doi.org/10.1145/2930889.2930890). (ACM Distinguished Student Author Awards)

Research Notes

- Ziming Li and Yi Zhang. *A Note on Gröbner Bases of Ore Polynomials over a PID*, 2016. <https://yzhang1616.github.io/GB.pdf>
- Yi Zhang. *Integer Vectors of a Fundamental Parallelepiped*, 2016.

Papers in Preperation

- Manuel Kauers, Ziming Li and Yi Zhang. *Apparent Singularities of D-finite Systems*, 2016.

Talks

5. *Contraction of Linear Difference and Differential Operators*. Contributed talk at ISSAC'16 (the 41st International Symposium on Symbolic and Algebraic Computation), Wilfrid Laurier University, Waterloo, Canada, July, 2016.
4. *Contraction of Linear Difference and Differential Operators*. Invited talk at the seminar of Center for Combinatorics, Nankai University, Tianjin, China, June, 2016.
3. *An Algorithm for Contraction of an Ore Ideal*. Invited talk at the seminar of Institute of Discrete Mathematics and Geometry, Vienna University of Technology, Vienna, Austria, October, 2015.

2. *The Restriction Problem for D-finite Functions*. Contributed talk at the Workshop on Computational and Algebraic Methods in Statistics, The University of Tokyo, Tokyo, Japan, March, 2015.
1. *An Algorithm for Decomposing Multivariate Hypergeometric Terms*. Contributed talk at CM'13 (the 5th National Conference of Computer Mathematics), Jilin University, Changchun, China, August, 2013.

Peer-Reviewing Activities

For each journal and conference the number of completed reviews is given in parentheses.

- International Symposia on Symbolic and Algebraic Computation (1)
- Journal of Symbolic Computation (2)

Programming Language

C, Matlab, Maple, Mathematica, Macaulay2 and Sage

Hobbies and Interests

- Sports: Table Tennis, Billiards, Tennis.
- Reading: Philosophy, History, Literature.
- Language: Chinese (native), English (fluent), German (basic).