

# 个人简历

## 个人资料

姓名	张熠
出生日期	1988年12月12日
籍贯与户口	江苏省常州市
国籍	中国
婚姻状况	未婚



## 联系方式

电子邮箱	<a href="mailto:yi.zhang@ricam.oeaw.ac.at">yi.zhang@ricam.oeaw.ac.at</a>
地址	Johann Radon Institute for Computational and Applied Mathematics (RICAM) Austrian Academy of Sciences Altenbergerstraße 69, A-4040 Linz, Austria
办公室	S2 0435 (Science Park II)
电话号码	+43 732 2468 5235
个人网页	<a href="https://www.ricam.oeaw.ac.at/people/member/?firstname=Yi&amp;lastname=Zhang">https://www.ricam.oeaw.ac.at/people/member/?firstname=Yi&amp;lastname=Zhang</a>

## 研究领域

计算机代数(Computer Algebra), 计算代数几何(Computational Algebraic Geometry), Ore代数(Ore Algebras), Gröbner基(Gröbner Bases), 算法组合学(Algorithmic Combinatorics) 以及实验数学(Experimental Mathematics)

## 教育经历

09/2013 – 02/2017	理学博士(优秀毕业生), 数学, <a href="#">代数研究所</a> , <a href="#">约翰开普勒林茨大学</a> , 奥地利(导师: <a href="#">Manuel Kauers</a> 教授与 <a href="#">李子明</a> 研究员)
09/2011 – 07/2016	理学博士, 应用数学, <a href="#">数学机械化重点实验室</a> , <a href="#">中国科学院数学与系统科学研究院</a> , <a href="#">中国科学院大学</a> , 北京, 中国(导师: <a href="#">Manuel Kauers</a> 教授与 <a href="#">李子明</a> 研究员)
09/2007 – 07/2011	理学学士, 数学与应用数学(师范), <a href="#">数学科学学院</a> , <a href="#">苏州大学</a> , 苏州, 中国

我于09/2013 到06/2015 在Manuel Kauers 教授的指导下在[奥地利符号计算研究中心](#), 约翰开普勒林茨大学进行博士阶段的学习与研究。

## 工作经历

03/2017 – 08/2018 博士后, [Johann Radon Institute for Computational and Applied Mathematics](#) (RICAM), [奥地利科学院](#). (合作导师: [Christoph Koutschan](#) 博士)

## 访问经历

2017年五月 访问学者, [数学系](#), [神户大学\(Kobe University\)](#), 日本. (合作导师: [Nobuki Takayama](#) (高山信毅) 教授)

## 获奖情况

07/2016 [ACM最佳学生论文](#), ISSAC'16, SIGSAM, Association for Computing Machinery  
09/2009 – 07/2010 苏州大学人民综合二等奖学金  
09/2008 – 07/2009 苏州大学人民综合一等奖学金  
09/2007 – 07/2008 苏州大学人民综合一等奖学金  
09/2007 – 07/2008 苏州大学朱敬文奖学金  
09/2007 – 07/2008 苏州大学三好学生

## 博士论文

- Yi Zhang. [Univariate Contraction and Multivariate Desingularization of Ore Ideals](#). PhD thesis, Institute for Algebra, Johannes Kepler University Linz, 2017.

## 学术论文

- 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](#). (ACM Distinguished Student Author Awards)
- Manuel Kauers, Ziming Li and Yi Zhang. *Apparent Singularities of D-finite Systems*, 2017. arXiv:[705.00838](#), submitted to Journal of Symbolic Computation.
- Thieu Vo Ngoc and Yi Zhang. *Laurent Series Solutions of Algebraic Ordinary Differential Equations*, 2017.
- Yi Zhang. *Desingularization in the  $q$ -Weyl Algebra*, 2017. (in preparation)
- Lin Jiu, Christoph Koutschan, Satoshi Kuriki, Nobuki Takayama, Akimichi Takemura and Yi Zhang. *Euler Characteristic Method for the Largest Eigenvalue of a Random Matrix*, 2017. (work in progress)

## 研究注解(Research Notes)

- Yi Zhang. *Testing  $q$ -shift Equivalence of Polynomials*, July, 2017.
- Yi Zhang. *Integer Vectors of a Fundamental Parallelepiped*, 2016.
- Ziming Li and Yi Zhang. *A Note on Gröbner Bases of Ore Polynomials over a PID*, 2016. <https://yzhang1616.github.io/GB.pdf>

## 软件包

- [qDesingularization.m](#), a Mathematica package for computing desingularized operators and the  $q$ -Weyl closure of a given  $q$ -difference operator in the first  $q$ -Weyl algebra. It is based on joint work with Dr. Christoph Koutschan. The package requires the availability of Koutschan's package [HolonomicFunctions.m](#) and Kauer's package [Singular.m](#). For a description of the usage of the package, see the [Example.nb](#) notebook.
- [KamkeODEs.mw](#), A Maple worksheet for checking the maximal comparability and noncriticality of algebraic ordinary differential equations in Kampe's collection. It is based on joint work with Dr. Thieu Vo Ngoc. The worksheet requires the availability of the Maple package [KamkeODEs.mpl](#).

## 学术报告

6. *Apparent Singularities of  $D$ -finite Systems*. Contributed talk at ACA'17 (the 23rd Conference on Applications of Computer Algebra), Jerusalem College of Technology, Jerusalem, Israel, July, 2017.
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.

## 学术期刊评审工作

对于以下的学术期刊及会议论文，括号内给出了相应的评审次数。

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

## 其他技能

- 编程语言: C, Matlab, Maple, Mathematica, Macaulay2 以及 Sage
- 口语: 中文(母语), 英文(流利), 德文(基础)