# 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 yi.zhang@ricam.oeaw.ac.at

地址 Johann Radon Institute for Computational and Applied

Mathematics (RICAM)

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Altenbergerstraße 69, A-4040 Linz, Austria

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?firstname=Yi&lastname=Zhang

### 研究领域

计算机代数, 计算代数几何, 以及算法组合学

### 教育经历

09/2013 - 02/2017 理学博士 (优秀毕业生), 数学, 代数研究所, 约翰开普勒

林茨大学, 林茨, 奥地利

导师: Manuel Kauers 教授与 李子明 研究员

09/2011 - 07/2016 理学博士, 应用数学, 数学机械化重点实验室, 中国科学

院数学与系统科学研究院, 中国科学院大学, 北京, 中国

导师: Manuel Kauers 教授与 李子明 研究员

09/2007 - 07/2011 理学学士, 数学与应用数学 (师范), 数学科学学院, 苏州

大学, 苏州, 中国

### 工作经历

03/2017 – 至今 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 SIGSAM颁发的ISSAC2016杰出学生论文奖

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 苏州大学校三好学生

### 博士论文

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

#### 学术论文

- 1. 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. (ISSAC为计算机科学"Algorithms and Theory"领域的国际顶级会议,NUS评价为Rank 1,AUS评价为A+)(EI, 该文获得ISSAC2016杰出学生论文奖)
- 2. Manuel Kauers, Ziming Li and Yi Zhang. Apparent Singularities of D-finite Systems, 2017. arXiv:705.00838, submitted.
- 3. Thieu Vo Ngoc and Yi Zhang. Laurent Series Solutions of Algebraic Ordinary Differential Equations, 2017, submitted.
- 4. Yi Zhang. Desingularization in the q-Weyl Algebra, 2017, in preparation.
- 5. 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, in preparation.

### 研究注记 (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 Kample'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

- 1. 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.
- 2. 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.
- 3. Contraction of Linear Difference and Differential Operators. Invited talk at the seminar of Center for Combinatorics, Nankai University, Tianjin, China, June, 2016.
- 4. 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.
- 5. 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.
- 6. 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 Symposiums on Symbolic and Algebraic Computation (1)
- Journal of Symbolic Computation (2)

# 其他技能

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