

## 基本信息



陈昌昊 教授

## 联系方式

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## 个人简介

陈昌昊，男，博士，特任教授

教育经历：

2012-2016，芬兰奥卢大学，博士，导师：Ville Suomala 副教授

2009-2012，湖北大学，硕士，导师：文胜友教授

2005-2009，湖北大学，本科

工作经历：

2021.01-至今，安徽大学数学科学学院，特任教授

2020.01-2020.12，香港中文大学，博士后，合作导师：丰德军教授

2018.03-2019.12，新南威尔士大学，博士后，合作导师：Igor Shparlinski 教授

2016.10-2018.03，新南威尔士大学，博士后，合作导师：Catherine Greenhill 教授

## 主要研究方向

分形几何，主要研究包括随机Cantor集的结构、分形集的正交投影、Weyl和例外集的结构、以及连续型问题的有限域版本

## 教学情况

2021.02-2021.06 初等数论

2020.01-2020.05 微积分

2015.09-2015.12 实分析助教

## 科研情况

主要从事分形几何及其相关领域的研究，具体研究课题包括随机Cantor集的结构、分形集的正交投影、Weyl和例外集的结构、以及连续型问题的有限域版本。已在 *Adv. Math.*、*Intern. Math. Res. Notices*、*Quart. J. Math.*、*J. Number Theory*、*Proc. Amer. Math. Soc* 等期刊发表论文20余篇。

已发表或接受论文：

- [24] C. Chen. Self-similar sets with super-exponential close cylinders, *Ann. Acad. Sci. Fenn. Math*, (accepted).
- [23] C. Chen and I. E. Shparlinski. Restricted mean value theorems and metric theory of restricted Weyl sums, *Quart. J. Math*, (accepted).
- [22] C. Chen and I. E. Shparlinski. Hybrid bounds on two-parametric family Weyl sums along smooth curves, *Michigan Math J*, (accepted).
- [21] C. Chen and I. E. Shparlinski. On a Hybrid Version of the Vinogradov Mean Value Theorem, *Acta Math. Hungar*, (accepted).
- [20] C. Chen and C. Greenhill. Threshold functions for patterns in random subsets of finite vector spaces, *Journal of Combinatorics*, 12 (2021), 157-183.
- [19] C. Chen, X. Wang and S. Wen. On uniform distribution of alpha beta-orbits, *J. Number Theory*, 219 (2021), 386-403.
- [18] C. Chen and I. E. Shparlinski. Small values of Weyl sums, *J. Math. Anal. Appl*, 495 (2021), 24743.
- [17] C. Chen and I. E. Shparlinski, On large values of Weyl sums, *Adv. Math*, 370 (2020), 107216.
- [16] C. Chen and I. E. Shparlinski, Hausdorff dimension of the large values of Weyl sums, *J. Number Theory*, 214 (2020), 27--37.
- [15] C. Chen. Finite field analogue of restriction theorem for general measures, *Finite Fields and Their Appl*, 63 (2020), 101642.
- [14] C. Chen, M. Wu and W. Wu. Accessible values of Assouad and the lower dimensions of subsets, *Real Anal. Exchange*, 45 (2020), 85-100.
- [13] C. Chen. Discretized sum-product for large sets, *Mosc. J. Comb. Number Theory*, 9 (2020), 17--27.
- [12] C. Chen and I. E. Shparlinski, New bounds of Weyl sums, *Intern. Math. Res. Notices*, (2019), 3112--3126
- [11] C. Chen and S. Wen. On thin carpets for doubling measures, *Proc. Amer. Math. Soc*, 147 (2019), 3439--3449.
- [10] C. Chen, Bryce Kerr and Ali Mohammadi. A new sum-product estimate in prime fields, *Bull. Aust. Math. Soc*, 100 (2019), 268--280.
- [9] C. Chen. Restricted families of projections and random subspaces, *Real Anal. Exchange*, 43 (2018), 347--358.
- [8] C. Chen. Salem sets in vector spaces over finite fields, *Ark. Mat*, 56 (2018), 45--52.
- [7] C. Chen. Projections in vector spaces over finite fields, *Ann. Acad. Sci. Fenn. Math*, 43 (2018), 171--185.

- [6] C. Chen. A class of random Cantor sets, *Real Anal. Exchange*, 42 (2017), 79--120.
- [5] C. Chen, T. Ojala, E. Rossi and V. Suomala. Fractal percolation, porosity, and dimension, *J. Theoret. Probab.*, 30 (2017), 1471--1498.
- [4] C. Chen. Distribution of random Cantor sets on tubes, *Ark. Mat.*, 54 (2016), 39--54.
- [3] C. Chen and E. Rossi. Locally rich compact sets, *Illinois J. Math.*, 58 (2014), 779--806.
- [2] C. Chen, H. Koivusalo, B. Li and V. Suomala. Projections of random covering sets, *J. Fractal Geom.*, 1 (2014), 449--467.
- [1] C. Chen and S. Wen. Factorization of delta-monotone linear mappings, *Linear Algebra and its Applications*, 435 (2011), 2087--2095.

已投稿论文：

C. Chen, B. Kerr, J. Maynard and I. E. Shparlinski, Metric theory of Weyl sums, available at arxiv.org/abs/2011.09306.

主要荣誉：

2014 / 2016年，获芬兰博士基金，Vilho, Yrjo, and Kalle Vaisala foundation

2013年，获新世界数学奖，硕士论文银奖