CURRICULUM VITAE

PERSONAL DATA

Sheng Zhang
Place of Birth: Xiamen, China
Citizenship: China

EMPLOYMENT

Lecturer, School of Mathematics, Southwest Jiaotong University, 09/2016-present.

EDUCATION

Ph.D. in Mathematics, Texas A&M University, 2016. Advisor: William B. Johnson

M.S. in Pure Mathematics, Xiamen University, 2011. Advisor: Lixin Cheng

B.S. in Mathematics and Applied Mathematics, Xiamen University, 2008.

RESEARCH INTERESTS

Linear and nonlinear theory of Banach spaces, metric geometry

PUBLICATIONS AND PREPRINTS

1. *Coarse quotient mappings between metric spaces*, **Israel J. Math. 207** (2015), no. 2, 961–979.
2. *(β)-distortion of some infinite graphs*, **J. London Math. Soc. 93** (2016), no. 2, 481–501 (with F. P. Baudier).
3. *On the geometry of the countably branching diamond graphs*, **J. Funct. Anal. 273** (2017), no. 10, 3150–3199 (with F. Baudier, R. Causey, S. Dilworth, D. Kutzarova, N. L. Randrianarivony and Th. Schlumprecht).
4. *Asymptotic properties of Banach spaces and coarse quotient maps*, **Proc. Amer. Math. Soc. 146** (2018), no. 11, 4723–4734.
5. *A submetric characterization of Rolewicz's property (β)*, **Studia Mathematica 265** (2022), no. 3, 303–314.

RESEARCH GRANTS

National Natural Science Foundation of China, Grant Number 12071389 "Hölder classification of spheres and its applications", CNY 520,000 for 01/2021-12/2024, participant (PI: Qingjin Cheng).

National Natural Science Foundation of China, Grant Number 11801469 "Nonlinear Quotients of Banach Spaces", CNY 240,000 for 01/2019-12/2021, PI.

Fundamental Research Funds for the Central Universities in China, Grant Number 2682017CX060 "Some Asymptotic Properties of Banach Spaces", CNY 100,000 for 01/2017-12/2019, PI.

National Science Foundation, Grant Number DMS-1301604 "Banach Space and Metric Geometry", USD 293,000 for 08/2013-07/2017, participant (PI: William B. Johnson).

CONFERENCE, COLLOQUIUM, AND SEMINAR TALKS

One hour (online), *Metric characterizations of some Banach space properties*, College of Mathematics, Sichuan University, May 9, 2022.

One hour (online), *A submetric characterization of Rolewicz's property* (β), School of Mathematical Sciences, Xiamen University, March 22, 2021.

One hour (online), *A metric characterization of Rolewicz's property* (β), Banach spaces webinars, February 5, 2021.

30 minutes, *Metric characterization of some asymptotic properties of Banach spaces*, Theory of Banach Spaces and Related Topics, Tsinghua Sanya International Mathematics Forum, Sanya, China, August 30, 2018.

30 minutes, *Asymptotic geometry of Banach spaces and nonlinear quotient maps*, The 6th International Conference on Analytic Mathematics and its Applications (ICAMA2017), College of Mathematics and System Science, Xinjiang University, Urumqi, China, July 27, 2017.

Two hours, *On the geometry of the countably branching diamond graphs*, School of Mathematical Sciences, Xiamen University, Xiamen, China, June 9, 2017.

45 minutes, *Metric characterization of Banach spaces: local properties versus non-local properties*, Workshop in Functional Analysis and related topics, School of Mathematical Sciences, Xiamen University, Xiamen, China, November 27, 2016.

One hour, *Embedding infinite trees into Banach spaces with property* (β), School of Mathematical Sciences, Xiamen University, Xiamen, China, December 15, 2015.

30 minutes, *On the (β)-distortion of countably branching trees*, 2015 Summer Informal Regional Functional Analysis Seminar (SUMIRFAS), Department of Mathematics, Texas A&M University, College Station, Texas, USA, August 1, 2015.

One hour, *Stability of asymptotic structure under nonlinear quotient maps*, Banach Spaces Seminar, Department of Mathematics, Texas A&M University, College Station, Texas, USA, April 17, 2015.

Two hours, *Local versus global embeddability of locally finite metric spaces*, Fall School "Metric Embeddings: Constructions and Obstructions", Institut Henri Poincaré, Paris, France, November 5, 2014.

30 minutes, *Coarse quotient mappings between metric spaces*, Conference on Geometric Functional Analysis and its Applications, Laboratoire de Mathématiques de Besançon, Université de

Franche-Comté, Besançon, France, October 28, 2014.

One hour, *Nonlinear quotient mappings between Banach spaces*, School of Mathematical Sciences, Xiamen University, Xiamen, China, May 28, 2014.

PROFESSIONAL SERVICES

Referee for the following journals: SCIENCE CHINA Mathematics

Reviewer for *Mathematical Reviews*

TEACHING

Mathematical Analysis, Real Analysis, Functional Analysis, Linear Algebra

Last Updated: January 3, 2023