

XILUN LI

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Research Interests

Generalized Ricci Flow, Ricci Limit Space, Parabolic Bundle

Education

Peking University

Ph.D. in Mathematics, School of Mathematical Sciences

Sep. 2021 – Present

Beijing, China

University of Science and Technology of China

B.S. in Mathematics, School of the Gifted Young

Sep. 2017 – July 2021

Hefei, China

Publications and Preprints

- Xilun Li, Shengxuan Zhou, **New exotic examples of Ricci limit spaces**, *Adv. Math.* 462 (2025), Paper No. 110098, 19 pp.
- Xilun Li, **Entropy and heat kernel on generalized Ricci flow**, *J Geom Anal* 34 (2024), no. 2, Paper No. 42, 23 pp.
- Xilun Li, Yanan Ye, **On the shrinking solitons of generalized Ricci flow**, arXiv:2404.06141, accepted by *Math. Annalen*.
- Xilun Li, Gang Tian, **Hermitian-Einstein metrics on parabolic bundles over compact complex surfaces**, arXiv:2506.15458.
- Xilun Li, Yanan Ye, **Non-negativity of curvature along generalized Ricci flow**.

Talks

Ph.D. Students Conference

Entropy and heat kernel on generalized Ricci flow

October 2023

Peking University

Differential Geometry Seminar

On the Class VII surfaces

March 2024

Westlake University

Differential Geometry Forum

Examples of Ricci limit spaces with special tangent cones

June 2024

NUDT

Workshop on Geometric Analysis

Parabolic Hermitian-Einstein metrics over nonKähler manifolds

July 2025

Tsingdao

Teaching Assistant

Mathematical Analysis III

Fall 2022 & Fall 2024

Mathematical Analysis II

Spring 2022 & Spring 2023

Calculus

Fall 2021 & Fall 2023

Seminar

Perelman's proof on Poincaré conjecture

Fall 2024 & Spring 2025

Several topics on complex geometry

Fall 2024

Compact complex surfaces

Spring 2023

Kähler Ricci flow

Fall 2022

Bamler's theory on Ricci flow

Fall 2022

Cheeger-Colding theory on Ricci limit spaces

Spring 2022