CURRICULUM VITAE

Kewei Zhang

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1 Personal Data

Date of birth: January 4, 1992   Sex: Male
Nationality: Chinese
Email: kwzhang@pku.edu.cn
Status: Boxin Postdoc at BICMR, with Prof. Gang Tian as mentor.

2 Research area

- Complex Geometry

- Algebraic Geometry

3 Education

- Ph.D. in Mathematics, Peking University, 2014-2019.
  Advisor: Xiaohua Zhu

  (Visiting Student, University of Maryland, August 2017 – August 2018.
  Advisor: Yanir Rubinstein)

- B.S. in Mathematics and Applied Mathematics, Shanghai Jiaotong University of China, 2010-2014.

4 Honors and Awards

- China Postdoc Boxin Grant, 2019-2021.

- National Scholarship for Graduate Student (China), 2018.

- President Scholarship for Graduate Student of Peking University (China), 2014–2017.

- Special Scholarship for Graduate Student of Peking University (China), 2016.

5 Publications

1. K. Zhang, *On the optimal volume upper bound for Kähler manifolds with positive Ricci curvature (with an appendix by Y. Liu)*, arXiv:2001.04169, accepted by Int. Math. Res. Not. IMRN.

2. Y.A. Rubinstein, K. Zhang, *Angle deformation of Kähler-–Einstein edge metrics on Hirzebruch surfaces*, 2020, available here, in appear in Pure Appl. Math. Q.

3. Y.A. Rubinstein, K. Zhang, *Small angle limits of Hamilton's footballs*, Bull. London Math. Soc. 52 (2020) 189-199.

4. K. Zhang, *Some refinements of the partial C^0 estimate*, arXiv:1911.11328, to appear in Anal. PDE.

5. K. Zhang, *The greatest Ricci lower bound and stability threshold*, Surveys in Geometric Analysis 2019, Science Press Beijing (2020), 219-225.

6. I. Cheltsov, K. Zhang, *Delta invariants of smooth cubic surfaces*, Eur. J. Math. 5 (2019), 729-762.

7. I. Cheltsov, Y.A. Rubinstein, K. Zhang, *Basis log canonical thresholds, local intersection estimates, and asymptotically log del Pezzo surfaces*, Selecta Math. (N.S.) 25 (2019), Art. 34, 36 pp.

6 Preprints

1. K. Zhang, *A quantization proof of the uniform Yau–Tian–Donaldson conjecture*, 2020, arXiv:2102.02438.

2. K. Zhang, *Valuative invariants with higher moments*, 2020, arXiv:2012.04856.

3. Y.A. Rubinstein, G. Tian, K. Zhang, *Basis divisors and balanced metrics*, 2020, arXiv:2008.08829.

4. K. Zhang, *Continuity of delta invariants and twisted Kähler–Einstein metrics*, 2020, arXiv:2003.11858.

5. K. Zhang, C. Zhou, *Delta invariants of projective bundles and projective cones of Fano type*, 2020, arXiv:2003.06839.

6. K. Fujita, Y. Liu, H. Süss, K. Zhang and Z. Zhuang, *On the Cheltsov–Rubinstein conjecture*, 2019, arXiv:1907.02727, 2019.

7. K. Zhang *Stability thresholds of Fano T-varieties of complexity one*, 2018, available here.

7   Teaching Experience

Teaching Assistant at School of Mathematical Sciences, Peking University.

- *Calculus*, Spring, 2015.
- *Linear algebra*, Fall, 2015.
- *Linear algebra*, Spring, 2016.
- *Linear algebra*, Fall, 2016.

8   Invited Talks

- Algebraic invariants and its applications (series of lectures), Chinese Academy of Sciences, from October 17, 2020.
- Analytic invariants in Kähler–Einstein problem, Beihang University, September 24, 2020.
- Stability thresholds and canonical metrics, Complex Geometry Seminar (online), Chalmers tekniska högskola, Göteborg, Sweden, September 21, 2020.
- Basis divisors and balanced metrics, Workshop on geometric analysis, Dalian University of Technology, September 17, 2020.
- Basis divisors and balanced metrics, Worldwide Zoom Algebraic geometry Marathon, September 01, 2020.
- Delta invariants and canonical metrics, Tongji University Zoom seminar, July 30, 2020.
- Optimal volume upper bound for Fano manifolds, Chinese Academy of Sciences, December 20, 2019.
- Partial C^0 estimates on polarized Kähler manifolds, Morningside Center of Mathematics Chinese Academy of Sciences, December 6, 2019.
- Partial C^0 estimates on polarized Kähler manifolds, Postech, Pohang, Korea, November 20, 2019.

- Recent progress on the partial C^0 estimate, Chinese Academy of Sciences, November 13, 2019.

- Recent progress on the partial C^0 estimate, School of Mathematical Sciences, Shanghai Jiaotong university, November 01, 2019.

- Delta invariant and K-stability of Fano type manifolds, Yau Mathematical Sciences Center, Tsinghua University, October 09, 2019.

- Remarks on the asymptotically log Fano pairs, Institute of Mathematical Sciences, ShanghaiTech University, June 13, 2019.

- Local intersection inequalities and log canonical thresholds, National Research University, Higher School of Economics, Moscow, Russia, April 11, 2019.

- Delta invariant and its computation, School of Mathematical Sciences, Xiamen University, March 23, 2019.

- Stability Thresholds on Fano type manifolds, School of Mathematical Sciences, Zhejiang University, August 29, 2018.