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# Junsheng Zhang

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## EDUCATION

### Univeristy of California, Berkeley

Berkeley, CA

*Ph.D. in Mathematics*

2019–2024

Academic advisor: Song Sun

Dissertation: On Calabi-Yau and singular Kähler-Einstein metrics asymptotic to cones,  
and Hermitian-Yang-Mills connections on some complete Kähler manifolds

### University of Science and Technology of China

Hefei, China

*B.S. in Mathematics and Applied Mathematics*

2015 - 2019

## RESEARCH

**Junsheng Zhang** On polynomial convergence to tangent cones for singular Kähler-Einstein metrics. *arXiv preprint arXiv:2407.07382*

**Sean Timothy Paul, Song Sun, Junsheng Zhang** On the generalized numerical criterion. *International Mathematics Research Notices*, 1073–7928, 2024, 07

**Junsheng Zhang** A note on the supercritical deformed Hermitian-Yang-Mills equation. *arXiv preprint arXiv:2302.06592*

**Song Sun, Junsheng Zhang** No semistability at infinity for Calabi-Yau metrics asymptotic to cones. *Invent. math.* 233, 461–494 (2023)

**Junsheng Zhang** Hermitian-Yang-Mills connections on some complete non-compact Kähler manifolds. *Mathematische Annalen*, 1–41 (2024)

## TEACHING EXPERIENCE

### Graduate student instructor for Department of Mathematics, UC Berkeley

*Spring and Fall 2020: Math 54 (Linear Algebra and Differential equations)*

*Spring 2021: Math 53 (Multivariable Calculus)*

*Fall 2022 and Spring 2023: Math 16A (Analytic Geometry and Calculus)*

*Fall 2023: Math 110 (Linear Algebra)*

## RESEARCH TALKS

UWaterloo Geometry and Topology Seminar, University of Waterloo, Nov. 2023

Differential Geometry Seminar, UC Irvine, Nov. 2023

Geometry and Topology Seminar, University of Wisconsin-Madison, Oct. 2023

Informal Complex Geometry and PDE Seminar, Columbia University, Oct. 2023

Simons Collaboration on Special Holonomy in Geometry, Analysis, and Physics: Progress and Open Problems, Stony Brook, Sep. 2023

Differential Geometry Seminar, UC Berkeley, Apr. 2023

Around Complex Geometry, University of Illinois at Chicago, Apr. 2023