# Han, Jiyuan

## **Contact** information

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## Employment

Purdue University, 2018-2021 Golomb Visiting Assistant Professor of Mathematics Mentor: Chi Li

## Education

University of Wisconsin Madison, May, 2018 Ph.D. in Mathematics Advisor: Jeff Viaclovsky

University of Wisconsin Madison, May, 2013 BS. in Mathematics, BS. in Computer Science

#### **Research** interest

Geometric Analysis, Algebraic Geometry

# Papers

Deformation theory of scalar-flat Kähler ALE surfaces (with Jeff Viaclovsky), (American Journal of Mathematics)

Local moduli of scalar-flat Kahler ALE surfaces (with Jeff Viaclovsky) (Geometric Analysis. Progress in Mathematics)

Existence and compactness theory for the ALE scalar-flat Kahler surfaces (with Jeff Viaclovsky) (Forum of mathematics, sigma)

On the Yau-Tian-Donaldson conjecture for generalized Khler-Ricci soliton equations (with Chi Li) (arXiv:2006.00903)

Algebraic uniqueness of Khler-Ricci flow limits and optimal degenerations of Fano varieties (with Chi Li) (arXiv:2009.01010)

#### **Teaching Experience**

Instructor August 2018 - May 2021

**Teaching Assistant** September 2013 - May 2015 September 2016 - May 2018

# Teaching awards

Fall 2017 Honored Instructor

# Service

Co-Organizer of Purdue Geometry Seminar (Fall 2020)

#### Talks

Wenjun Wu math seminar at USTC, China, 2016. Title: Deformation theory of scalar-flat Kähler ALE metrics Geometry and topology seminar at UW-Madison, US, 2016. Title: Deformation theory of scalar-flat Kähler ALE metrics Geometry and topology seminar at UW-Madison, US, 2017. Title: On closedness of ALE SFK metrics on minimal ALE Kähler surfaces Differential geometry seminar at UC-Irvine, US, 2017. Title: On closedness of ALE SFK metrics on minimal ALE Kähler surfaces Geometry and topology seminar at Stony Brook university, US, 2017. Title: On closedness of ALE SFK metrics on minimal ALE Kähler surfaces AMS Sectional Meeting (at Vanderbilt University), US, 2018. Title: On closedness of ALE SFK metrics on minimal ALE Kähler surfaces The UC-Berkeley Differential Geometry Seminar, US, 2019 Title: Existence and compactness theory for ALE scalar-flat Kahler surfaces Trends in Modern Geometry 2019, Tsinghua University, China, 2019 Title: Existence and compactness theory for ALE scalar-flat Kahler surfaces Purdue Geometry Seminar, US, 2020 Title: On the Yau-Tian-Donaldson conjecture for generalized Khler-Ricci soliton equations Geometry and topology seminar at Stony Brook university, US, 2020. Title: On the Yau-Tian-Donaldson conjecture for generalized Khler-Ricci soliton equations