

Chao-Ming LIN

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Interests

Differential Geometry / Complex Geometry / Geometric Analysis.

Education

- _____ Sep 2017–June 2023 (expected)
Ph.D. Candidate in Mathematics
University of California, Irvine
Advisors: [Zhiqin Lu](#) and [Xiangwen Zhang](#)
- _____ Sep 2014–July 2016
M.S. in Mathematics
National Taiwan University
Advisor: [Chung-Jun Tsai](#)
- _____ Sep 2010–May 2014
B.S. in Mathematics
National Taiwan University

Work Experience

- _____ Nov 2022–Dec 2022, Dec 2020–April 2021
Visitor in Mathematics
[National Center for Theoretical Sciences](#)
Mentor: [Chung-Jun Tsai](#)
- _____ Aug 2016–June 2017
R.A. in Mathematics
[National Center for Theoretical Sciences](#)
Mentor: [Chung-Jun Tsai](#)

Papers

- _____ Sep 2022
On the Convexity of General Inverse σ_k Equations
<https://arxiv.org/abs/2209.11370>
- _____ Jan 2022
The deformed Hermitian–Yang–Mills Equation, the Positivstellensatz, and the Solvability

<https://arxiv.org/abs/2201.01438>

Dec 2020

Deformed Hermitian–Yang–Mills equation on Compact Hermitian Manifolds, **Mathematical Research Letters**, [accepted](#) (2022)

<https://arxiv.org/abs/2012.00487>

Conference Talks

Dec 2021

Recent Developments in Complex Geometry and Geometric Analysis

Canadian Mathematical Society Winter Meeting

<https://www2.cms.math.ca/Events/winter21/abs/rdc#cml>

Invited Seminar Talks

May 2023

Ohio State University

April 2023

UCR Geometry-Topology seminar

University of California, Riverside

<https://sites.google.com/view/brian-coller/ucr-geometry-topology-seminar>

Feb 2023

Algebraic Geometry in String Theory Seminar

Center Of Mathematical Sciences And Applications at Harvard University

<https://cmsa.fas.harvard.edu/event/agst-22423/>

Feb 2023

Informal Complex Geometry and PDE Seminar

Columbia University

<http://math.columbia.edu/~kjs/seminar>

Jan 2023

Joint Geometric Analysis Seminar

Chinese University of Hong Kong

<https://www.math.cuhk.edu.hk/seminars/convexity-general-inverse-k-equations-and-some-applications>

Apr 2022

The Mathematics Colloquium at Rutgers-Newark
Rutgers University
<https://sites.rutgers.edu/chen-wan/colloquium/>

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- I
- Mar 2022
Geometric Analysis Seminar
Beijing International Center for Mathematical Research
<https://bicmr.pku.edu.cn/content/show/43-2663.html>
<https://www.math.pku.edu.cn/teachers/jianchunchu/seminar.html>
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- I
- Feb 2022
Geometry and Topology Seminar
McMaster University
https://www.math.mcmaster.ca/news-events/events/g-1-4r0bt9198d8j7q501kob4lbt5v_202202032030.html
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- I
- Oct 2021
Differential Geometry Seminar
University of California, Irvine
<https://www.math.uci.edu/node/37181>
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- I I I I
- Dec 2022, Nov 2022, Mar 2021, Dec 2018, Apr 2017
NCTS Differential Geometry Seminar
National Center for Theoretical Sciences
https://ncts.ntu.edu.tw/events_1_detail.php?nid=2389
https://ncts.ntu.edu.tw/events_1_detail.php?nid=2367
https://ncts.ntu.edu.tw/events_1_detail.php?nid=1917
https://www.math.sinica.edu.tw/www/seminar/abstract_view.jsp?seminar_id=2689
https://140.112.36.108/events_1_detail.php?nid=889
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- II
- Apr 2021, Dec 2020
NCTS Postdoc Seminar on Differential Geometry
National Center for Theoretical Sciences

Teaching Experience

Lecturer

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- I
- Summer II 2022
Math 3A Introduction to Linear Algebra

Teaching Assistant

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| _____ I | Spring 2023 Math 2A Calculus |
| _____ II | Winter 2019, Summer II 2018 Math 2B Calculus |
| _____ I I | Summer I 2021, Fall 2019 Math 3A Introduction to Linear Algebra |
| _____ IIII | Winter 2020, Summer I 2020, Summer I 2019, Spring 2019, and Fall 2018 Math 3D Elementary Differential Equations |
| _____ II | Spring 2022, Fall 2021 Math 5A Calculus for Life Sciences |
| _____ I | Fall 2020 Math 5B BioCalculus |
| _____ I I | Fall 2020, Fall 2019 Math 118 Theory of Differential Equations |
| _____ II I | Winter 2022, Spring 2021, Winter 2021 Math 134B Financial Derivatives |
| _____ I I | Spring 2023, Spring 2021 Math 134C Financial Models |
| _____ I I | Summer I 2022, Summer I 2020 Math 175 Combinatorics |
| _____ I | Spring 2020 Math 205C Introduction to Graduate Analysis |

Honors and Awards

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| _____ I | Spring 2021 Von Neumann Outstanding Performance as a Graduate Student Award |
| _____ I | Spring 2016 Phi Tau Phi Scholastic Honor |
| _____ I | Fall 2015 Excellent TA Award |

Tsai Wang-Lin Scholarship

Hu Dun-Fu Scholarship

Fall 2011

High GPA Award

Li Bung-Fung Scholarship

Misc Experience

June 2018–April 2023

Treasurer of Taiwanese Graduate Student Association

University of California, Irvine

Last updated: April 22, 2023.