

Chao-Ming LIN

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Interests

Differential Geometry / Complex Geometry / Geometric Analysis.

Education

- Sep 2017–May 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

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/>

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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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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Oct 2021

Differential Geometry Seminar

University of California, Irvine

<https://www.math.uci.edu/node/37181>

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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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Apr 2021, Dec 2020

NCTS Postdoc Seminar on Differential Geometry

National Center for Theoretical Sciences

Teaching Experience

Lecturer

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Summer II 2022

Math 3A Introduction to Linear Algebra

Teaching Assistant

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Winter 2019, Summer II 2018

Math 2B Calculus

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Summer I 2021, Fall 2019

Math 3A Introduction to Linear Algebra

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Winter 2020, Summer I 2020, Summer I 2019, Spring 2019, and Fall 2018

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

Honors and Awards

_____ 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
_____ I	Fall 2011
	High GPA Award
	Li Bung-Fung Scholarship

Misc Experience

_____	June 2018–present
	Treasurer of Taiwanese Graduate Student Association
	University of California, Irvine

Last updated: February 21, 2023.