

Chao-Ming LIN

<https://www.math.uci.edu/~chaomin/>

<mailto:chaominl@uci.edu>

tel: +1 949-466-2130

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,
Journal of Functional Analysis, accepted (2023)
<https://arxiv.org/abs/2209.11370>
- Jan 2022
The deformed Hermitian–Yang–Mills Equation, the Positivstellensatz

satz, 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

Differential Geometry Seminar

Ohio State University

<https://math.osu.edu/events/convexity-general-inverse-sigmak-equations-and-some-applications>

April 2023

UCR Geometry-Topology seminar

University of California, Riverside

<https://sites.google.com/view/brian-collier/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>

_____ I

Apr 2022
The Mathematics Colloquium at Rutgers-Newark
Rutgers University
<https://sites.rutgers.edu/chen-wan/colloquium/>

_____ 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>

_____ I

Feb 2022
Geometry and Topology Seminar
McMaster University
https://www.math.mcmaster.ca/news-events/events/g-1-4r0bt9198d8j7q501kob4lbt5v_202202032030.html

_____ I

Oct 2021
Differential Geometry Seminar
University of California, Irvine
<https://www.math.uci.edu/node/37181>

_____ | | | 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

_____ II

Apr 2021, Dec 2020
NCTS Postdoc Seminar on Differential Geometry
National Center for Theoretical Sciences

Teaching Experience

Lecturer

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

Teaching Assistant

_____ 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

_____ I Spring 2021
Von Neumann Outstanding Performance as a Graduate Student
Award

_____ | Spring 2016
Phi Tau Phi Scholastic Honor

_____ | 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: May 09, 2023.