

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
<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

University of California, Riverside

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/>

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

Teaching Experience

Lecturer

_____ I	<p>Summer II 2022</p> <p>Math 3A Introduction to Linear Algebra</p>
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Teaching Assistant

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

Honors and Awards

_____	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: April 06, 2023.