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
Advisor: Chung-Jun Tsai

Aug 2016–June 2017
R.A. in Mathematics
National Center for Theoretical Sciences
Advisor: 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_category/algebraic-geometry-in-string-theory/

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

Feb 2022
Geometry and Topology Seminar
McMaster University
https://www.math.mcmaster.ca/news-events/events/g-1-4r0bt91
98d8j7q501kob4lbt5v_202202032030.html

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

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

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

Teaching Experience

Lecturer

Summer II 2022
Math 3A Introduction to Linear Algebra

Teaching Assistant

Winter 2019, Summer II 2018
Math 2B Calculus

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

Last updated: February 21, 2023.