

Chen-Wei (Milton) Lin

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Education

Ph.D. of Mathematics, Johns Hopkins University, 2019-Present

Supervisor: David Gepner.

Masters of Mathematics, University of Oxford, 2018-2019

Dissertation Topic: Index of Operators and KK -theory. Supervisor: Dr. Andre Henriques.

Fourth year examinations, ranked 4th in cohort, best dissertation.

BA Mathematics, University of Oxford, 2015-2018

Supervisors: Prof. Glenys Luke, Prof. Tom Sanders.

Preliminary Examinations, ranked Top 10 of approx. 200 students.

Third Year Examinations, ranked Top 10 of approx. 150 students.

Awards and honors

Gibbs Dissertation Prize for Mathematics

Awarded by the Oxford Mathematical Institute.

One or two prizes each year for best Masters of Mathematics dissertation.

Alison Sheppard Prize for Mathematics

Awarded by St Hugh's College, Oxford.

Third year mathematician with highest first class in College.

St Hugh's College Scholarship Award

Awarded by St Hugh's College, Oxford, annually.

First Class Honors in each year.

Seminars/talks

2023

Topology Seminar, JHU, a talk on *Dieudonné modules, following Lurie and Hopkins*.

Topics in representation theory seminar, JHU, a talk on *Uniformization of G -bundles*.

Topological Quantum Field Theory learning seminar, JHU, a talk on *Classical field theory and σ -models*.

Topics in representation theory seminar, JHU, a talk on *Affine Grassmanian*.

[Prismatic cohomology](#) Seminar organizer, with Naruki Masuda and David Gepner.

2022

Heegner points study group, JHU, on *Selmer structures and duality*.

Derived deformation theory seminar, JHU, three talks on *Calegari-Geraghty method in modularity lifting*.

Jacquet Langlands Correspondence student seminar, JHU, four talks.

2021

[eCHT Hermitian \$K\$ -theory](#), a talk on Poincaré categories.

[Category theory seminar](#), a talk on differential cohomology and cohesive topoi.

Derived deformation theory seminar, JHU, on formal moduli problems.

Seminar on Stack of Langlands Parameter, joint with U Chicago, a talk on [representation stacks](#).

[Non-archimedean study group](#), on *Formal schemes and rigid generic fiber*.

2020

[DaFra Seminar](#) on Condensed mathematics, a talk on *Solid Abelian Groups*.

[Étale homotopy study group](#), Kings College London, a talk on *Étale homotopy obstruction*.

Topological Hochschild Homology Seminar, UIC, two talks on *Construction of THH*.

Spectral Algebraic Geometry Seminar, UIC, two talks on *Spectrally Ringed ∞ -Topoi*.

[eCHT Kan Fall Seminar](#), two talks on chapter 1 of *A Survey of Elliptic Cohomology*, J. Lurie.

[Number Theory Seminar](#), Uni. of Melbourne, two talks on *Contragredient representations*.

[Oberseminar](#), Uni. of Regensburg, a talk on *The p -complete Frobenius*.

2019

Masters presentation, University of Oxford. On *The Atiyah Singer-Index Theorem*.

Reading Group, University of Oxford. On *Model Categories*, Dwyer and Spalinski.

Conferences/schools

2024

Arizona Winter School, Abelian Varieties March 2nd - 6th.

[Mentorship for Alignment Research Students](#) (MARS) Cambridge (UK), on singular learning theory, Jan-March.

[AI Safety Camp](#) (AISC), on autoformalization, Jan-April.

2023

Center of AI Safety, Machine Learning Safety Course. Summer 2023.

[ELLIS Summer School on Probabilistic Machine Learning](#), University of Cambridge, July 17th-July 21st

OxML (Oxford Machine Learning) 2023, University of Oxford, July 6th - July 17th.

[Geometry and topology meets data analysis and machine learning](#), Northeastern University, June 8th-June 10th.

[MSRI Machine Learning](#), UC San Diego, June 26th -July 7th.

[The arithmetic of Langlands Program](#), University of Bonn, Germany, May 1st - May 14th.

[Non-archimedean geometry and eigenvarieties](#), University of Heidelberg, Germany, March 6th - March 17th.

[Topological Hochschild Homology and Zeta Values](#), January 30th - February 3rd.

2020-2022

APAW, A pair of automorphic workshops, Oregon, July.

Motives and arithmetic groups, summer school in Strasbourg, June.

Workshop on Derived Geometry, CIRM Barcelona.

MSRI Higher Categories and Categorifications, Jan-March.

Teaching/supervision

Spring 2024

Directed Reading Program, organizer, Johns Hopkins University.

Fall 2023

SOUL Course, Interpretability in AI, Lecturer, Johns Hopkins University.

Honors Single Variable Calculus, Lecturer, Johns Hopkins University.

Directed Reading Program, organizer and mentor, Johns Hopkins University.

Spring 2023

Calculus III Head Teaching Assistant under Dr. Xiong Wang.

[Directed Reading Program](#) organizer with Benjamin Dees.

Directed Reading Program mentor.

Mentee: Orisis Zheng.

Topic: Zariski's lemma in algebraic geometry.

Fall 2022

Calculus II Teaching Assistant under Dr. Fajun Meng.

Directed Reading Program organizer with Benjamin Dees.

Directed Reading Program mentor.

Mentee: Orisis Zheng.

Topic: Maxwell Equations and differential geometry.

Mentee: Nick Lombardi.

Topic: Introduction to Langlands Program.