# 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

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

Topological Quantum Field Theory learning seminar, a talk on Classical field theory and  $\sigma$ -models.

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

Prismatic cohomology Seminar organizer, with Naruki Masuda and David Gepner.

# $\boldsymbol{2022}$

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

Derived deformation theory seminar, JHU, three talks on Calegori-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  $\infty$ -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 Saplinski*.

# Conferences/schools

#### 2023

Institute of Advanced Studies, p-adic workshop, November 10th-17th, 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

 $\label{eq:oxml} {\tt OxML} \ ({\tt Oxford} \ {\tt Machine} \ {\tt Learning}) \ 2023, \ {\tt University} \ {\tt of} \ {\tt Oxford}, \ {\tt July} \ 6{\tt th} \ {\tt -July} \ 17{\tt th}.$ 

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

## Fall 2023

Honors Single Variable Calculus, Lecturer Directed Reading Program, organizer and mentor.

#### 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.