## 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.

 $\label{eq:preliminary Examinations} Preliminary \ Examinations, \ {\rm ranked \ Top \ 10 \ of \ approx.} \ \ 200 \ {\rm students.}$ 

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

#### 2024

Topology E-theory seminar, JHU, on Gross-Hopkins period map.

Number theory learning seminar, JHU, motivic periods, two talks on Chen's Theorem.

## 2023

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

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

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

Topics in representation theory seminar, JHU, 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 Calegori-Geraghty method in modularity lifting. Jacquet Langlands Correspondence student seminar, JHU, four talks.

#### 2021

eCHT Hermitian K-theory, on Poincaré categories.

Category theory seminar, 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, 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

## 2024

WARTHOG, Oregon, July 22nd-26th.

Cooperative AI Summer School, Santa Cruz, 19th-23rd.

Summer School and Workshop on Relative Langlands Duality, Minnesota, June 3rd - June 8th.

Prospects of formal mathematics, Bonn, May 9th-16th.

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

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

## 2023

ELLIS Summer School on Probabilistic Machine Learning, University of Cambridge, July 17th-July 21st 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.

 $\label{eq:control} \mbox{Directed Reading Program mentor.}$ 

Mentee: Orisis Zheng.

Topic: Maxwell Equations and differential geometry.

Mentee: Nick Lombardi.

Topic: Introduction to Langlands Program.