Siyan Daniel Li-Huerta

PERSONAL INFORMATION	*Website*: https://math.mit.edu/~sdlh/	*Citizenship*: United States
	Email: sdlh@mit.edu	*Languages*: English, Chinese

INTERESTS   Arithmetic geometry, number theory, and representation theory

POSITIONS

Max Planck Institute for Mathematics,   September 2024 to August 2025
Postdoctoral Fellow

Massachusetts Institute of Technology,   September 2023–
NSF Postdoctoral Fellow

EDUCATION

Harvard University,   September 2018 to May 2023
Doctor of Philosophy, Mathematics
Advisor: Mark Kisin

University of Chicago,   September 2017 to May 2018

Princeton University,   September 2013 to June 2017
Bachelor of Arts, Mathematics (magna cum laude)
Senior thesis advisor: Sophie Morel

PUBLICATIONS AND PREPRINTS

Dihedral long root A-packets for G_2: the dihedral case.
(with P. Bakić, A. Horawa, and N. Sweeting)

Local-global compatibility over function fields.
https://arxiv.org/abs/2301.09711

The plectic conjecture over local fields.
https://arxiv.org/abs/2208.09962

The plectic conjecture over function fields.
https://arxiv.org/abs/2106.05382

The local Langlands correspondence for GL_n over function fields.
Algebra Number Theory. Vol. 16 (2022), No. 9, 2119–2214

INVITED TALKS

Séminaire Groupes Réductifs et Formes Automorphes (IMJ–PRG)	June 2023
Trimester Seminar Series (HIM)	June 2023
Number Theory Seminar (Johns Hopkins)	April 2023
Lie Groups and Representation Theory Seminar (University of Maryland)	April 2023
Number Theory Seminar (MIT)	April 2023
Upstate New York Number Theory Conference (University of Rochester)	April 2023
Number Theory Seminar (Boston University)	March 2023
Number Theory/Representation Theory Seminar (Boston College)	January 2023
Number Theory Seminar (Northwestern)	October 2022
Number Theory Seminar (UChicago)	October 2022
Number Theory Seminar (Harvard)	October 2022
Number Theory Seminar (Tsinghua)	September 2022
Automorphic Forms and Arithmetic Seminar (Columbia)	September 2022

	Recent Advances in Modern p-Adic Geometry	March 2022
	Number Theory/Representation Theory Seminar (UW-Madison)	January 2022
	Number Theory Seminar (Harvard)	October 2021
	Number Theory Seminar (Duke)	August 2021

Awards	NSF Mathematical Sciences Postdoctoral Research Fellowship	2023–
	Certificate of Distinction in Teaching ($\times 2$) (Harvard)	2021, 2023
	Eckhardt Graduate Scholarship (UChicago)	2017
	Middleton Miller Prize (Princeton)	2017
	Andrew H. Brown Prize (Princeton)	2016

Teaching

At MIT:
- Independent Study in Mathematics (18.099)   Spring 2024

At Harvard:
- Vector Calculus and Linear Algebra II (Math 22b)   Spring 2023
- Introduction to Calculus (Math 1a)   Fall 2021
- Fourier Analysis on Number Fields (Math 99r)   Fall 2020
  (materials available at `https://math.mit.edu/~sdlh/math99r_f20/`)
- Calculus, Series, and Differential Equations (Math 1b)   Fall 2019

Service

Number Theory Seminar at MIT, co-organizer   Spring 2024

Reading courses at MIT:
- Eunsu Hur, p-adic geometry   Spring 2024
- Eunsu Hur, Galois representations and the Langlands–Kottwitz method   Fall 2023

Community Committee at Harvard, grad student representative   Spring 2023

Number Theory Seminar at Harvard, co-organizer   Fall 2022 to Spring 2023

Internal Number Theorists Seminar at Harvard, organizer   Fall 2022

Directed Reading Program at Harvard, mentor:
- Beverly Fu and AnaMaria Perez, p-adic numbers   Spring 2022
- Kenz Kallal, Galois representations and modular forms   Spring 2021
- Adam Adams, representations of p-adic groups   Spring 2020
- Zihong Peter Chen, étale cohomology   Spring 2019

Trivial Notions Seminar at Harvard, organizer   Spring 2019

Mentoring Möbius at Princeton, founder and organizer   Fall 2014 to Spring 2016

Refereeing: J. Inst. Math. Jussieu, J. Algebra, Q. J. Math.