

# Si Ying Lee

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CONTACT INFORMATION	Stanford University 450 Jane Stanford Way Building 380 Stanford, California 94305	leesy1@stanford.edu
WEBSITE	<a href="https://siyinglee.github.io">https://siyinglee.github.io</a>	
RESEARCH INTERESTS	My research interests lie in the fields of number theory and algebraic geometry, with a particular focus on the geometry and cohomology of Shimura varieties, and applications to the Langlands program.	
EMPLOYMENT	<b>Stanford University</b> Szegö Assistant Professor	2023 - present
	<b>Max Planck Institut für Mathematik</b> Postdoctoral Fellow	2022 - 2023
EDUCATION	<b>Harvard University</b> Ph.D. in Mathematics <ul style="list-style-type: none"><li>• Thesis: Eichler-Shimura relations</li><li>• Advisor: Mark Kisin</li></ul>	2017 - 2022
	<b>National University of Singapore</b> Bachelor of Science (Honours) in Mathematics <ul style="list-style-type: none"><li>• Honours with Highest Distinction</li></ul>	2013 - 2017
PREPRINTS & PUBLICATIONS	Si Ying, Lee & Keerthi Madapusi. <i>p-isogenies with G-structure</i> , in preparation	
	Si Ying, Lee. <i>Unramifiedness of weight 1 Galois representations associated to Hilbert modular varieties</i> , available on author's website	
	Thomas L. Browning, Pavel Čoupek, Ellen Eischen, Claire Frechette, Serin Hong, Si Ying Lee & David Marcil. <i>Constructing vector-valued automorphic forms on unitary groups</i> , <a href="https://arxiv.org/abs/2408.05198">https://arxiv.org/abs/2408.05198</a>	
	Linus, Hamann & Si Ying, Lee. <i>Torsion vanishing for some Shimura varieties</i> , <a href="https://arxiv.org/abs/2309.08705">https://arxiv.org/abs/2309.08705</a>	
	Si Ying, Lee. <i>Semisimplicity of étale cohomology of certain Shimura varieties</i> , <a href="http://arxiv.org/abs/2206.07283">http://arxiv.org/abs/2206.07283</a>	
	Si Ying, Lee. <i>Eichler-Shimura relations for Shimura varieties of Hodge type</i> , <a href="http://arxiv.org/abs/2006.11745">http://arxiv.org/abs/2006.11745</a>	
	Heng Huat, Chan & Si Ying, Lee. <i>Congruences associated with the modular j-invariant</i> , INTEGERS (2017)	

AWARDS AND SCHOLARSHIPS	2019	Raphael and Daniel Salem Fellowship
	2017	Medal of Excellence in Mathematics
	2017	Lijen Industrial Development Medal
	2017	Special Programme in Mathematics Prize
	2016	Tan Teck Chwee Prize
	2015	Lim Soo Peng Prize
	2013–2017	Kent Ridge Undergraduate Merit Scholarship
INVITED TALKS	Oct 2024	Clay Research Workshop
	Aug 2024	BICMR Number theory Seminar
	July 2024	Oberwolfach Arithmetic Geometry Workshop
	July 2024	ICMS Workshop, Families of $p$ -adic automorphic forms
	March 2024	Johns Hopkins Number Theory Seminar
	March 2024	Simons Annual Collaboration Meeting
	Feb 2024	Berkeley Number Theory Seminar
	Nov 2023	Stanford Number Theory Seminar
	Aug 2023	Hausdorff Trimester Global Langlands Conference
	Mar 2023	Universite Lille Number Theory Seminar
	Mar 2023	MSRI Shimura Varieties and $L$ -functions
	Feb 2023	Oberwolfach Arithmetic of Shimura Varieties Workshop
	Jan 2023	MSRI Connections Workshop
	Oct 2022	MPIM Arbeitsgemeinschaft Arithmetische Geometrie (2 talks)
	Oct 2022	London Number Theory Seminar
	Feb 2022	Boston College Number Theory Seminar
	Jan 2022	Stanford Number Theory Seminar
	Jan 2022	Nanyang Technological University Seminar
	Jan 2022	National University of Singapore Number Theory and Representation Theory Seminar
	Dec 2021	Johns Hopkins Junior Number Theory Days 2021
	Oct 2021	Berkeley Number Theory Seminar
	Nov 2020	Harvard Number Theory Seminar
	Nov 2020	University of Wisconsin - Madison Number Theory Seminar
	Sep 2020	University of Maryland - College Park Number Theory Seminar
TEACHING EXPERIENCE	<b>Stanford:</b>	
	Fall 2024	Instructor, Math 21 (Calculus III) (2 lecture groups, 200 students)
	Spring 2024	Instructor, Math 216C (Introductory Algebraic Geometry III)
	Fall 2023	Instructor, Math 20 (Calculus II) (2 lecture groups, 130 students, Sole instructor)
	<b>Harvard:</b>	
	Fall 2021	Teaching Fellow, Math 22a (Vector Calculus and Linear Algebra I)
	Fall 2020	Teaching Fellow, Math 22a (Vector Calculus and Linear Algebra I) Awarded the Certificate for Distinction in Teaching
	Fall 2019	Teaching Fellow, Math 23a (Linear Algebra and Real Analysis I) Awarded the Certificate for Distinction in Teaching
	Fall 2018	Teaching Fellow, Math 21a (Multivariable Calculus)
SERVICE	Organizer, BIRS-IASM New Tools in the Local and Global Langlands Programs 2025	
	Organizer, Noetherian Ring, Stanford Mathematics Department	
	Teaching Assistant, IAS Women+ and Mathematics 2024	
SEMINARS ORGANIZED	Learning seminar on Uniform Mordell <span style="float: right;"><i>Fall 2021</i></span>	

CITIZENSHIP	Singapore
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LANGUAGES	English Chinese
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