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Nawapan (Ploy) Wattanawanichkul

EDUCATION

2021–present	University of Illinois Urbana-Champaign M.S. and Ph.D. in mathematics graduate program Advisor: Jesse Thorner	IL, USA
2017–2021	Bowdoin College B.A., Mathematics major, Japanese minor, Completed with honors in mathematics Advisor: Naomi Tanabe	ME, USA
	Semester abroad (Spring 2020) Budapest Semesters in Mathematics (BSM), Completed with honors	Budapest, Hungary

PUBLICATIONS/PREPRINTS

1. *Effective correlation and decorrelation for newforms, and weak subconvexity for L -functions.* arXiv preprint, arXiv:2405.05249. (With an appendix by Jesse Thorner)
2. *Walking to Infinity Along Some Number Theory Sequences.* *Integers*, 24 (2024), 29 pp.
(With Steven J. Miller, Fei Peng, Tudor Popescu, and the Polymath REU program)
3. *An Alternative Approach to Computing $\beta(2K+1)$.* *Integers*, 23 (2023), 13 pp.
(With Naomi Tanabe)
4. *Modeling Random Walks to Infinity on Primes in $\mathbb{Z}[\sqrt{2}]$.* *J. Integer Seq.* 25 (2022), 21 pp.
(With Bencheng Li, Steven J. Miller, Tudor Popescu, and Daniel Sarnecki)
5. *Walking to Infinity On the Fibonacci Sequence.* *Fibonacci Quart.* 60 (2022), no. 5, pp. 293–299.
(With Bencheng Li, Steven J. Miller, Tudor Popescu, and Daniel Sarnecki)

PRESENTATIONS

Research Talks ([†] = upcoming talks)

Apr 2025	AFW, Automorphic Forms Workshop [†]	Denton, TX
Mar 2025	MAGNTS, Midwest Arithmetic Geometry and Number Theory [†]	Columbus, OH
Jan 2025	JMM: AMS Special Session on current directions in modular forms	Seattle, WA
Sep 2024	Kansas State University Student Number Theory Seminar	Remote
Jun 2024	Shandong University Number Theory Seminar	Remote
Apr 2024	Stanford University Student Number Theory Seminar	Remote
Mar 2024	UIUC Number Theory Seminar, Department of Mathematics, UIUC	Urbana, IL
Nov 2023	UIUC Graduate Number Theory Seminar (also Mar 2024, Oct 2024)	Urbana, IL
Jul 2022	The 20 th International Conference on Fibonacci Numbers and Their Applications, University of Sarajevo, Bosnia and Herzegovina.	Remote
May 2021	Honors Thesis, Department of Mathematics, Bowdoin College	Remote
Sep 2020	The Palmetto Joint Arithmetic, Modularity, and Analysis Series	Remote

Poster Presentations

Oct 2019	President's Summer Research Symposium, Bowdoin College	Brunswick, ME
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TEACHING EXPERIENCE

2024	Math Circle , University of Illinois Urbana-Champaign	Urbana, IL
2021–2024	Teaching Assistant <i>Department of Mathematics, University of Illinois Urbana-Champaign</i>	Urbana, IL
	Summer 2024	MATH 257 Linear Algebra (NetMath)
	Spring 2024	MATH 220 Differential Calculus (Head TA)*
	Fall 2023	MATH 221 Differential Calculus*
	Spring 2023	MATH 220 Differential Calculus (Head TA)*
	Fall 2022	MATH 220 Differential Calculus*
	Spring 2022	MATH 220 Differential Calculus*
	Fall 2021	MATH 231 Integral Calculus
	* = Ranked as an excellent teacher by students.	
	Grader	
	Summer 2023	MATH 347 Fundamental Mathematics
Summer 2022 & 2016–2017	Invited Speaker , Benchama Maharat Highschool	Ubon Ratchatani, Thailand
	Prepare over 200 students for Ordinary National Educational Test (ONET) and POSN competition, a regional round leading towards the International Mathematical Olympiad.	
Summer 2020	Polymath REU Teaching Assistant	Remote
	Guided students throughout the project, and organized weekly activities.	
	Supervisor: Steven Miller	
2018 - 2019	Quantitative Reasoning Tutor , Bowdoin College	Brunswick, ME
	Tutored during Students' of Color study nights; helped with courses such as mathematical reasoning, linear algebra, and calculus.	
	Mathematics Grader	
	Fall 2019	MATH 2303 Functions of Complex Variables
	Fall 2019	MATH 2602 Introduction to Group Theory
	Spring 2019, Fall 2018	MATH 2020 Mathematical Reasoning
Summer 2018	Undergraduate Teaching Assistant , Brewster Academy	Wolfeboro, NH
	Worked for a summer program funded by the Thai Government; prepared handouts and facilitated SAT class; organized activities for students.	
Summer 2017	“Kroo Bannok” Teaching Program , The Mirror Foundation	Chiangrai, Thailand
	Taught students of underrepresented ethnic groups; planned activities and gave short courses on Thai and English languages, mathematics, sciences, and arts.	

AWARDS

2021	Edward S. Hammond Mathematics Prize , Bowdoin College	Brunswick, ME
	Awarded to a senior who is completing mathematics major with distinction.	
2021	Phi Beta Kappa , Alpha of Maine Chapter	ME
2019 – 2021	Smyth Mathematics Prize , Bowdoin College	Brunswick, ME
	Awarded to a student with highest mathematics grades during the first two years.	
2019	Kibbe Science Fellowship , Bowdoin College	Brunswick, ME
	Fellowship for summer research in STEM in summer 2019.	
2017 – 2019	Sarah and James Bowdoin Scholar , Bowdoin College	Brunswick, ME
	Given to the top 20 percent of students, as calculated by grade point average.	
2016 – present	King’s Scholarship , Royal Thai Government	Thailand
	A full-ride scholarship for overseas undergraduate studies.	

WORKSHOPS & CONFERENCES ([†] = upcoming talks)

Apr 2025	Automorphic Forms Workshop (AFW) [†]	Denton, TX
Mar 2025	Midwest Arithmetic Geometry and Number Theory (MAGNTS) [†]	Columbus, OH
Jan 2025	Joint Mathematics Meeting 2025	Seattle, WA
May 2024	Shanks Conference, International Conference on L-Functions and Automorphic Forms	Nashville, TN
Oct 2023	Midwest Arithmetic Geometry and Number Theory (MAGNTS)	Ann Arbor, MI
Jan 2023	Spring Opportunities, IAS	Princeton, NJ
Jun 2022	The Connecticut Summer School in Number Theory (CTNT)	Storrs, CT
Jul 2019	Park City Mathematics Institute (PCMI)	Park City, UT