CONTACT

Assistant Professor of Mathematics

Duke Kunshan University

8 Duke Ave, Kunshan, Suzhou,
Jiangsu Province, China, 215316

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EMPLOYMENT

DIMI DO I MENT		
2023.08-	Assistant Professor of Mathematics	Duke Kunshan University
2023.08-	Assistant Professor of the Practice of DKU Stu	dies Duke University
2024.07-	Adjunct of the Faculty of Graduate Studies	Dalhousie University
2020.08-2023.07	Lecturer in Mathematics	Duke Kunshan University
2020.08-2023.07	Assistant Professor of the Practice	Trinity College of Arts & Science, Duke University
2019.09-2020.07	Research Associate Department of	of Mathematics and Statistics, Dalhousie University
2017.09-2019.08	Killam Postdoc Fellow Department of	of Mathematics and Statistics, Dalhousie University
2017.03-2017.08	Research Scientist, Johann Radon Inst. for Cor	np. and Appl. Math., Austrian Academy of Science
2016.06-2017.02	Postdoc Fellow Research Institute for S	Symbolic Computation, Johannes Kepler University

RESEARCH INTERESTS

Symbolic Computation, Number Theory, Combinatorics, Special Functions, Information Geometry

EDUCAT	ION
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2011.08-2016.05	Tulane University, Ph.D. in Mathematics	Advisor: Victor H. Moll
2013.09-2014.02	Research Institute for Symbolic Computation, Johannes Kepler	Advisor: Carsten Schneider
	University, Exchange Ph.D. Student	
2008.09-2010.07	Beijing Institute of Technology, Master of Science	Advisor: Huafei Sun
2004.09-2008.06	Beijing Institute of Technology, Bachelor of Science	Thesis Advisor: Huafei Sun

GRANT AWARDED

	LD .		
2023.07-2025.06	WHU-DKU Joint Grant Seed	Wuhan University and Duke Kunshan University	
	DKU PI of "Wuhan University-Duke Kunshar	University-Dalhousie University Research	
	Platform on Combinatorics and Number Theo	ry"	
2023.01-2024.12	Faculty Learning Community, Center for Teac	thing and Learning, Duke Kunshan University	
2022.07-2024.06	WHU-DKU Joint Grant Seed	Wuhan University and Duke Kunshan University	
	Research team member of Dr. Dongmian Zou,	, Duke Kunshan University	
2022.01-2022.12	Gradescope Research Project Grant	Gradescope	
	Using Gradescope in math courses, facilitated by Center for Teaching and Learning, Duke		
	Kunshan University		
2021.07-2023.06	Interdisciplinary Seed Grant	Duke Kunshan University	
	Quantum algorithms for computational number theory, linear algebra, and combinatorics		
	Joint with Dr. Myung-Joong Huang, Duke Kunshan University		
2017.09-2019.08	Killam Research Fund	Killam Trust @ Dalhousie University	
	Research Support for Killam Postdocs		

PUBLICATIONS

(While working on the projects, undergraduate students are marked with a *)

Воок

1 H. Sun, L. Peng, Y. Cheng, D. Li, and **L. Jiu**, *Mathematical Foundations of Information Geometry*, Science Press, Beijing, 2025. ISBN: 978-7-03-080107-4.

PAPERS

- 39 S. Chern, **L. Jiu**, S. Li*, and L. Wang, Leading coefficient in the Hankel determinants related to binomial and *q*-binomial transforms, submitted for publication.
- **L. Jiu** and D. Wang*, On *b*-ary binomial coefficients with negative entries, Submitted for Publication.
- 37 **L. Jiu** and L. Peng, Information geometry and alpha-parallel prior of the beta-logistic distribution, *Comm. Statist. Theory Methods.* **54** (2025), 3292–3306.
- 36 S. Chern, **L. Jiu**, and I. Simonelli, A central limit theorem for a card shuffling problem, *J. Combin. Theory Ser. A* **214** (2025), Article 106048.
- 35 **L. Jiu** and Y. Li*, Hankel determinants of certain sequences of Bernoulli polynomials: A direct proof of an inverse matrix entry from Statistics, *Contrib. Discrete Math.* **19** (2024), 64–84.
- Q. Chen, S. Chern, and L. Jiu, Multi-headed lattices and Green functions, *J. Phys. A: Math. Theor.* **57** (2024) Article 465204.

- 33 S. Chern and **L. Jiu**, Hankel determinants and Jacobi continued fractions for *q*-Euler numbers, *C. R. Math. Acad. Sci. Paris* **362** (2024), 203–216.
- 32 K. Dilcher and L. Jiu, Hankel determinants of shifted sequences of Bernoulli and Euler numbers, *Contrib. Discrete Math.* **18** (2023), 146–175.
- Z. Bradshaw, I. Gonzalez, **L. Jiu**, V. H. Moll, and C. Vignat, Compatibility of the method of brackets with classical integration rules, *Open Math.* **21** (2023), Article number: 20220581.
- L. Jiu and D. Y. H. Shi, Moments and cumulants on identities for Bernoulli and Euler numbers, *Math. Reports* **24** (2022), 643–650.
- 29 **L. Jiu** I. Simonelli, and H. Yue*, Loop Decompositions of Random Walks and Nontrivial Identities of Bernoulli and Euler Polynomials, *Integers* **22** (2022), A91.
- 28 K. Dilcher and L. Jiu, Hankel Determinants of sequences related to Bernoulli and Euler Polynomials, *Int. J. Number Theory* **18** (2022), 331–359.
- 27 K. Dilcher and **L. Jiu**, Orthogonal polynomials and Hankel determinants for certain Bernoulli and Euler polynomials, *J. Math. Anal. Appl.* **497** (2021), Article 124855.
- 26 I. Gonzales, L. Jiu, and V. H. Moll, An extension of the method of brackets. Part 2, Open Math. 18 (2020), 983–955
- L. Jiu and C. Koutschan, Calculation and properties of zonal polynomials, *Math. Comput. Sci.* **14** (2020), 623–640.
- N. Takayama, L. Jiu, S. Kuriki, and Y. Zhang, Computations of the Expected Euler Characteristic for the Largest Eigenvalue of a Real Wishart Matrix, *J. Multivariate Anal.* 179 (2020), Article 104642.
- 23 **L. Jiu**, C. Vignat, and T. Wakhare, Analytic Continuation for Multiple Zeta Values using Symbolic Representations, *Int. J. Number Theory* **16** (2020), 579–602.
- L. Jiu and C. Vignat, Connection coefficients for higher-order Bernoulli and Euler polynomials: a random walk approach, *Fibonacci Quart.* **57** (2019), 84–95.
- 21 L. Jiu and D. Y. H. Shi, Matrix representation for multiplicative nested sums, *Colloq. Math.* 158 (2019), 183–194.
- 20 **L. Jiu** and D. Y. H. Shi, Orthogonal polynomials and connection to generalized Motzkin numbers for higher-order Euler polynomials, *J. Number Theory* **199** (2019), 389–402.
- 19 I. Gonzalez, K. Kohl, **L. Jiu**, and V. H. Moll, The method of brackets in experimental mathematics, *Frontiers of Orthogonal Polynomials and q-Series*, Z. Nashed and X. Li eds., World Scientific Publishers, 2018.
- 18 **L. Jiu**, V. H. Moll, and C. Vignat, A symbolic approach to multiple zeta values at the negative integers, *J. Symbolic Comput.* **84** (2018), 1–13.
- 17 I. Gonzales, K. Kohl, **L. Jiu**, and V. H. Moll, An extension of the method of brackets. Part 1, *Open Math.* **15** (2017), 1181–1211.
- 16 **L. Jiu**, Integral representations of equally positive integer-indexed harmonic sums at infinity, *Research in Number Theory* **3** (2017), Article 3:10.
- 15 C. Li, E. Zhang, **L. Jiu**, and H. Sun, Optimal control on special Euclidean group via natural gradient descent algorithm, *Sci. China Inf. Sci.* **59** (2016), Article: 112203.
- 14 I. Gonzalez, **L. Jiu**, and V. H. Moll, Pochhammer symbol with negative indices. A new rule for the method of brackets, *Open Math.* **14** (2016), 681–686.
- T. Amdeberhan, A. Dixit, X. Guan, L. Jiu, A. Kuznetsov, V. H. Moll, and C. Vignat, The integrals in Gradshteyn and Ryzhik. Part 30: trigonometric functions, *Scientia Series A: Mathematical Sciences* 27 (2016), 47–74.
- T. Amdeberhan, A. Dixit, X. Guan, L. Jiu, V. H. Moll, and C. Vignat, A series involving Catalan numbers. Proofs and demonstrations, *Elem. Math.* **71** (2016), 109–121.
- 11 **L. Jiu** and C. Vignat, On binomial identities in arbitrary bases, *J. Integer Seq.* **19** (2016), Article 16.5.5.
- 10 **L. Jiu**, V. H. Moll, and C. Vignat, A symbolic approach to some identities for Bernoulli-Barnes polynomials, *Int. J. Number Theory* **12** (2016), 649–662.
- 9 A. Dixit, **L. Jiu**, V. H. Moll, and C. Vignat, The finite Fourier transform of classical polynomials, *J. Aust. Math. Soc.* **98** (2015), 145–160.
- 8 T. Amdeberhan, A. Dixit, X. Guan, **L. Jiu** and V. H. Moll, The unimodality of a polynomial coming from a rational integral. Back to the original proof, *J. Math. Anal. Appl.* **420** (2014), 1154–1166.
- A. Byrnes*, **L. Jiu**, V. H. Moll, and C. Vignat, Recursion rules for the hypergeometric zeta functions, *Int. J. Number Theory* **10** (2014), 1761–1782.
- 6 **L. Jiu**, V. H. Moll, and C. Vignat, Identities for generalized Euler polynomials, Integral Transforms *Spec. Funct.* **25** (2014), 777–789.
- 5 Z. Zhang, H. Sun, L. Jiu, and L. Peng, A natural gradient algorithm for stochastic distribution systems, *Entropy* **16** (2014), 4338–4352.
- 4 F. Zhang, H. Sun, **L. Jiu**, and L. Peng, The arc length variational formula on the exponential manifold, *Math. Slovaca* **63** (2013), 1101–1112.
- L. Peng, H. Sun, and L. Jiu, The geometric structure of the Pareto distribution, *Bol. Asoc. Mat. Venez.* 14 (2007), 5–13.

- 2 L. Jiu and H. Sun, On minimal homothetical hypersurfaces, *Collog. Math.* 109 (2007), 239–249.
- 1 X. Wang and **L. Jiu**, Characterizing hypersurfaces of generalized rotation through its normal lines, *Journal of Ningde Normal University (Natural Science)* **02** (2006), 117–119.

ACADEMIC TALKS

47 Examples of Computer Proofs: From Elementary to Recent Ones

Invited Honours Seminar Talk, Department of Mathematics and Statistics, Dalhousie University, Halifax, NS, Canada, Jan. 15, 2025.

46 Multi-headed Lattices and Green Functions

Invited Seminar Talk, Department of Mathematics and Statistics, Dalhousie University, Halifax, NS, Canada, Oct. 8, 2024.

45 *q*-Analogue on Hankel Determinants: the *q*-Euler Numbers and the *q*-Binomial Transform *Canadian Number Theory Association XVI*, Fields Institute, Toronto, ON, Canada, June 10–14, 2024.

44 Shuffle to One, Shuffle to Normal

Number Theory Seminar, Department of Mathematics and Statistics, Dalhousie University, Halifax, NS, Canada, Jan. 31, 2024.

43 Random Walk Models for Identities Involving Bernoulli and Euler Polynomials

Number Theory Seminar, Department of Mathematics and Statistics, Dalhousie University, Halifax, NS, Canada, Mar. 6, 2023.

42 Random Walk Model on Finite Number of Sites

Seminar, School of Mathematics, Anhui University, Online, Oct. 19, 2022.

41 Bernoulli Symbol and Multiple Zeta Function at Non-negative Integers

The First International Conference on Multiple Zeta Values and Related Topics, Online, Aug. 08-09, 2022.

40 Hankel Determinants of Certain Sequences of Bernoulli and Euler Polynomials Seminar, Department of Mathematics, Zhejiang Sci-Tech University, Online, June 12, 2022.

39 **Bernoulli and Euler Symbols: Umbral Calculus, Random Variables, and Multiple Zeta Values**Duke Kunshan University-Shanghai Jiao Tong University Joint Workshop for Mathematics and Data Science, Shanghai, P. R. China, Jan. 5, 2022.

38 Random Walk Models for Non-trivial Identities Involving Bernoulli and Euler Polynomials of Higher-orders

Suzhou Area Youth Mathematicians 2nd Annual Workshop, Soochow University, Kunshan, Suzhou, Jiangsu Province, P. R. China, Sept. 25–26, 2021.

Random Walks and Identities Involving Bernoulli and Euler Polynomials of Higher-order Seminar, Institute of Statistics and Big Data, Renmin University of China, Beijing, P. R. China, June 18, 2021.

Examples on Computer Proofs

Seminar, Wuhan University, Wuhan, Hubei Province, P. R. China, May 28, 2021.

35 Hankel Determinant of Sequences Related to Bernoulli and Euler Polynomials

DKU-WHU Math and Stat Academic Conference, Wuhan University, Wuhan, Hubei Province, P. R. China, May 27, 2021.

34 Hankel Determinant on Sequences Related to Bernoulli and Euler Polynomials

Suzhou Area Youth Mathematicians 1st Annual Workshop, Duke Kunshan University, Kunshan, Suzhou, Jiangsu Province, P. R. China, Nov. 14–15, 2020.

33 Three Examples on Computer Proofs

Zu Chongzhi Colloquium Series, Duke Kunshan University, Kunshan, Suzhou, P. R. China, Nov. 6, 2020.

32 Introduction to Four Symbolic Integration Methods: Two Examples

Number Theory Seminar, Department of Mathematics and Statistics, Dalhousie University, Halifax, NS, Canada, Sept. 23, 2019

31 On b-ary Binomial Coefficients

Number Theory Seminar, Department of Mathematics and Statistics, Dalhousie University, Halifax, NS, Canada, Sept. 16, 2019

30 Orthogonal Polynomials for Higher-order Euler Polynomials

15th International Symposium on Orthogonal Polynomials, Special Functions and Applications, Hagenberg, Austria, July 22–26, 2019.

29 On Harmonic Sums: Integral and Matrix Representations with Connections to Partition-theoretic Generalization of the Riemann Zeta-function and Random Walks

Analytic and Combinatorial Number Theory: The Legacy of Ramanujan (A conference in honor of Bruce C. Berndt's 80th birthday), University of Illinois at Urbana-Champaign, Urbana, IL, U. S. A., June 6–9, 2019.

28 Random Walk Approaches to Identities on Higher-order Bernoulli and Euler Polynomials

American Mathematical Society Spring Southeastern Sectional Meeting, Auburn University, Auburn, AL, U. S. A., Mar. 15–17, 2019.

27 Random Walk & Identities

Number Theory Seminar, Department of Mathematics and Statistics, Dalhousie University, Halifax, NS, Canada, Feb. 25, 2019

26 Matrix Representation for Multiplicative Nested Sums

2019 Joint Mathematics Meetings, Baltimore, MD, U. S. A., Jan. 16-19, 2019.

25 Orthogonal Polynomials for Bernoulli and Euler Polynomials

Number Theory Seminar, Department of Mathematics and Statistics, Dalhousie University, Halifax, NS, Canada, Jan. 7, 2019

24 Three Examples of Computer Proofs of Combinatorial Results

Honours Seminar, Department of Mathematics and Statistics, Dalhousie University, Halifax, NS, Canada, Oct. 17, 2018

23 Matrix Representation for Multiplicative Nested Sums

Number Theory Seminar, Department of Mathematics and Statistics, Dalhousie University, Halifax, NS, Canada, Sept. 21, 2018.

22 Bernoulli Symbol and Sum of Powers

6th International Congress on Mathematical Software, University of Notre Dame, Notre Dame, IN, U. S. A., July 24–27, 2018.

21 Random Walks and Identities for High-order Bernoulli and Euler Polynomials

18th International Conference on Fibonacci Numbers and Their Applications, Dalhousie University, Halifax, NS, Canada, July 1–8, 2018.

20 Matrix Representations for Bernoulli and Euler Polynomials

2018 Canadian Mathematical Society Summer Meeting, University of New Brunswick, Fredericton, NB, Canada, June 1–4, 2018.

19 Two Sequences Related to Bernoulli and Euler Numbers

Number Theory Seminar, Department of Mathematics and Statistics, Dalhousie University, Halifax, NS, Canada, May 30, 2018.

18 Hidden Walks

Number Theory Seminar, Department of Mathematics and Statistics, Dalhousie University, Halifax, NS, Canada, Feb. 26, 2018.

17 Introduction to Zonal Polynomials

Number Theory Seminar, Department of Mathematics and Statistics, Dalhousie University, Halifax, NS, Canada, Jan. 22, 2018.

16 The Probabilistic and Combinatorial Interpretations of the Bernoulli Symbol

2017 Canadian Mathematical Society Winter Meeting, University of Waterloo, Waterloo, ON, Canada, Dec. 8–11, 2017.

15 Bernoulli Symbol on Multiple Zeta Values at Negative Integers

23rd Conference on Applications of Computer Algebra (Commemorating the heritage of Jonathan Michael Borwein), Jerusalem College of Technology, Jerusalem, Israel, July 17–21, 2017.

14 Bernoulli Symbol \mathcal{B} : from Umbral Calculus to Random Variable and Combinatorics

Number Theory Seminar, Department of Mathematics and Statistics, Dalhousie University, Halifax, NS, Canada, Oct. 13, 2017.

13 Visualization of Bernoulli Numbers

Colloquium, Department of Mathematics and Statistics, Dalhousie University, Halifax, NS, Canada, Oct. 12, 2017.

12 On Bernoulli Symbol ${\mathscr B}$

Klagenfurt-Linz-Wien Workshop, Riefnitz, Austria, May 3-6, 2017.

11 The Method of Brackets (MoB) and Integrating by Differentiating (IbD) Method

Laboratoire des Signaux et Systemès, Université Paris Sud XI, Orsay, France, Dec. 9, 2016.

10 "Random Walks" for Harmonic Sums

SFB Statusseminar, Strobl, Austria, Nov. 27-30, 2016.

9 A Hot Pot

Algorithmic Combinatorics Seminar, Research Institute for Symbolic Computations, Johannes Kepler University, Hagenberg im Mühlkreis, Austria, Oct. 5, 2016.

8 On Binomial Identities in Arbitrary Bases

Beijing Key Laboratory on Mathematical Characterization, Analysis and Applications of Complex Information, Beijing Institute of Technology, Beijing, China, July 26, 2016.

7 Random Walk: A Probabilistic and Geometric Approach to Number Theory

International Conference on Mathematical Characterization, Analysis and Applications of Complex Information, Beijing Institute of Technology, Beijing, China, July 19–20, 2016.

6 The Method of Brackets

5th International Congress on Mathematical Software, The Zuse Institute Berlin, Berlin, Germany, July 11–14, 2016.

5 The Method of Brackets

Algorithmic Combinatorics Seminar, Research Institute for Symbolic Computations, Johannes Kepler University, Hagenberg im Mühlkreis, Austria, June 22, 2016.

4 Binomial Identities in Arbitrary Bases

Graduate Students Colloquium, Department of Mathematics, Tulane University, New Orleans, LA., U. S. A., Mar. 8, 2016

3 On Bernoulli Symbol \mathcal{B} and Its Applications

Center for Combinatorics, Nankai University, Tianjin, China, July 8, 2015.

2 Recursion Rules for the Hypergeometric Zeta Functions

Midwest Number Theory Conference for Graduate Students and Recent PhDs, X, University of Illinois at Urbana-Champaign, Urbana, IL, U. S. A., June 3–4, 2014.

1 Implementation of an Algorithm on Converting Sums into Nested Sums

Laboratoire des Signaux et Systemes, Université Paris Sud XI, Orsay, France, Jan. 8, 2014.

HONORS AND AWARDS

2016	Tea Doctor (for organizing departmental Tea Time)	Depart. of Math., Tulane University
2015	Tea Master (for organizing departmental Tea Time)	Depart. of Math., Tulane University
2014	Excellence in Mathematics	Depart. of Math., Tulane University
2013	Excellent Graduate Student Teacher	Depart. of Math., Tulane University
2008	Outstanding Graduates	Beijing Institute of Technology
2007	National Scholarship	Department of Education, P. R. China
2006	China Aerospace Science and Technology	China Aerospace Science and Technology
	Corporation Scholarship, 2nd Prize	Corporation

TEACHING EXPERIENCE

2025 Winter	MATH 6400	Integer Partitions and q-Series	Dalhousie University
2024 Fall	MATH 307	Complex Analysis	Duke Kunshan University
2023 Fall	MATH 105	Calculus	Duke Kunshan University
	MATH 202	Linear Algebra	Duke Kunshan University
	MATH 105	Calculus	Duke Kunshan University
	MATH 301	Advanced Introduction to Probability	Duke Kunshan University
2023 Spring	MATH 205	Probability and Statistics	Duke Kunshan University
1 6	MINITERM 102	Experimental Mathematics and Symbolic Computation	Duke Kunshan University
2022 Fall	INDSTU 391	Introduction to Algebraic Geometry	Duke Kunshan University
	MATH 105	Calculus	Duke Kunshan University
	MATH 306	Number Theory	Duke Kunshan University
	MATH 301	Advanced Introduction to Probability	Duke Kunshan University
2022 Spring	INDSTU 391	Variational Quantum Algorithms	Duke Kunshan University
	MATH 201	Multivariable Calculus	Duke Kunshan University
	MATH 301	Advanced Introduction to Probability	Duke Kunshan University
	MATH 201	Multivariable Calculus	Duke Kunshan University
2021 Fall	MATH 105	Calculus	Duke Kunshan University
	INDSTU 391	Riemann Zeta-Function	Duke Kunshan University
	INDSTU 391	Quantum Algorithm	Duke Kunshan University
	MATH 306	Number Theory	Duke Kunshan University
	INDSTU 391	Combinatorics	Duke Kunshan University
2021 Spring	MATH 205	Probability and Statistics	Duke Kunshan University
	MATH 301	Advanced Introduction to Probability	Duke Kunshan University
2020 Fall	MATH 105	Calculus	Duke Kunshan University
	MATH 201	Multivariable Calculus	Duke Kunshan University
2019 Summer	MATH 1030	Matrix Theory and Linear Algebra I	Dalhousie University
2019 Winter	MATH 3080	Introduction to Complex Variables	Dalhousie University
2016 Spring	MATH 1060	Long Calculus II	Tulane University
2015 Fall	MATH 1310	Consolidated Calculus	Tulane University

2015 Spring	MATH 1210	Long Calculus I	Tulane University
2014 Summer	MATH 1160	Long Calculus II	Tulane University

ACADEMIC SERVICES AND MEMBERSHIPS 2025— Reviewer for Mathematical Reviews

Organizing the mini-symposium Special Functions with Applications in Number Theory and Combinatorics 2025 at The Third Joint SIAM/CAIMS Annual Meetings

DEPARTMENTAL AND UNIVERSITY SERVICE

2021-	Organizer of the Discrete Math Seminar	Duke Kunshan University
2024	Member of 2025 Undergraduate Recruitment & Admissions Evaluation	Duke Kunshan University
2017-2020	Organizer of the Number Theory Seminar	Dalhousie University
2012-2016	Organizer of the Tee Time	Tulane University

STUDENT MENTORING, ADVISING, AND RESEARCH ACTIVITIES

Undergraduate Academic Advisor @ Duke Kunshan University

Class of	Number of Students	Names
2022	1	Ziang Zhou
2023	6	Heng Yue, Junyu Shi, Lezhen Qin, Mengfan Gong, Yushan Gu, Shi Wang
2024	3	Jeff Ulmasov, Jing Gu, Yuekang Li
2025	1	Jiaqi Wang
2026	3	Baoguanyan Kang, Dalia Guerrero Flores, Lei Wu,
2027	4	Jinggege Li, Rui Ling, Shengjie Bai, Yunjie Guo
2028	5	Binghan Cheng, Feiyang Zhong, Rustam Safaev, Shengyu Xu, Yihang Yin
TOTAL	23	

IOIAL	23					
UNDERGRA	Undergraduate Signature Work $(SW)^1$ (\cong Honor Thesis) Mentor @ Duke Kunshan University					
Class of	Number of Projects	Names				
2023	7	Heng Yue, Junyu Shi, Lezhen Qin, Mengfan Gong, Siyuan Wu, Ye Li, Youzhang He				
2024	3	Hongkai Zhu, Matilde Molinari Giglietti, Shuhan Li				
TOTAL	10					
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UNDERGRADUATE STUDENT RESEARCH PROJECTS

_	Year/Term	Student(s)	Project(s)	Result/Comments
	2021 Summer	Heng Yue Ye Li	Loop Decomposition of Random Walks Hankel Determinants on Some sequences	[29] in the Publication section[35] in the Publication section
	2022 Summer	Siyuan Wu Duanduan Wang	The Method of Brackets b-ary Related Sequences	Methematica Package [38] in the Publication section
	2023 Summer	Shuhan Li Hongkai Zhu	Hankel Determinants and Continued Fractions Weakly Increasing Trees on a Multiset	[39] in the Publication section Mathematica Package for SW
	2024 Summer	Jonah Barrington Julius Frizzell	On Cyclotomic Polynomials Factorization of Large Primes	Co-mentored with K. Dilcher @ Dalhousie University

RELEVANT SKILLS

Mandarin (native), English (fluent) Language:

Computer: Mathematica, SageMath, Python, Maple, LATEX, LYX

Packages: Zonal.sage https://jiulin90.github.io/Packages/Zonal.sage https://jiulin90.github.io/Packages/BNE.sage BNE.sage

¹https://signature-work.dukekunshan.edu.cn/signature-work-overview/