Chi Ho YUEN

CONTACT INFORMATION	Dept. of Math. Sciences, Office 04-2-11 Universitetsparken 5 2100 Copenhagen, Denmark		chy@math.ku.dk https://yuenchiho.github.io/	
EMPLOYMENT	2023 – current	University of Copenhagen Postdoctoral Researcher		
	2021 - 2023	University of Oslo Postdoctoral Research		
	2019 - 2021	Brown University Croucher Postdoctors		
	2018 - 2019	University of Bern Postdoctoral Research		
EDUCATION	2012 - 2018 2008 - 2012	Georgia Institute of Technology Ph.D. in Algorithms, Combinatorics, and Optimization Advisor: Matthew Baker Thesis: Geometric Bijections of Graphs and Regular Matroids Minor: Algorithms with Randomness The Chinese University of Hong Kong B.Sc. in Mathematics (First Class Honor)		
			n Engineering (First Class Honor)	
Publications	The Amoeba Dimension of a Linear Space. With Jan Draisma, Sarah Eggleston, Rudi Pendavingh, and Johannes Rau. Accepted by <i>Proceedings of the American Mathematical Society</i> .			
	Critical Groups of Adinkras up to 2-Rank of Cayley Graphs. Submitted. Preprint available at https://arxiv.org/abs/2301.02517/.			
	Sandpile Groups of Cayley Graphs of \mathbb{F}_2^r . With Jiyang Gao, Jared Marx-Kuo, and Vaughan McDonald. Submitted. Preprint available at https://arxiv.org/abs/1912.06919/.			
	Eigenvalues and Critical Groups of Adinkras. With Kevin Iga, Caroline Klivans, and Jordan Kostiuk. Advances in Applied Mathematics 143, Paper No. 102450, 2023.			
	Critical Groups of Strongly Regular Graphs and Their Generalizations. With Kenneth Hung. Innovations in Incidence Geometry: Algebraic, Topological and Combinatorial 19, 95–109, 2022.			
	Oriented Matroids from Triangulations of Products of Simplices. With Marcel Celaya and Georg Loho. Accepted by <i>Selecta Mathematica</i> .			
	Patchworking Oriented Matroids. With Marcel Celaya and Georg Loho. Journal of the London Mathematical Society 106, 3545–3576, 2022.			
	The Dimension of an Amoeba. With Jan Draisma and Johannes Rau. Bulletin of the London Mathematical Society 52 , 16–23, 2020.			
	Topological Bijections for Oriented Matroids. With Spancer Backman and Francisco Santos			

Séminaire Lotharingien de Combinatoire 82B, Art. 39, 12 pp, 2020.

With Spencer Backman and Francisco Santos.

On the Number of Circuit-cocircuit Reversal Classes of an Oriented Matroid. With Emeric Gioan.

Discrete Mathematics **342**, 1056–1059, 2019.

Geometric Bijections for Regular Matroids, Zonotopes, and Ehrhart Theory. With Spencer Backman and Matthew Baker.

Forum of Mathematics, Sigma 7, e45, 37pp, 2019.

Geometric Bijections Between Spanning Trees and Break Divisors. Journal of Combinatorial Theory, Series A 152, 159–189, 2017.

Selected Honors, $2019 - 2021$	Croucher Fellowship for Postdoctoral Research
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Awards and 2018 - 2019Georgia Tech School of Mathematics Best PhD Thesis Award

Scholarships Spring 2018 Institut Mittag-Leffler Fellowship

> Summer 2011 Caltech - Hong Kong Undergraduate Research Fellowship

SELECTED TALKS Filtrations of Tope Spaces of Oriented Matroids

MIT-Harvard Combinatorics Seminar. (September 2023)

QMUL Workshop on Matroids and Tropical Combinatorics. (January 2023)

KTH Combinatorics Seminar. (November 2022)

The Critical Groups of Adinkras

Brandeis Combinatorics Seminar. (November 2021)

Oriented Matroids from Triangulations of Products of Simplices

BIRS Workshop on Algebraic Aspects of Matroid Theory. (March 2023)

CAS Workshop on Real Structures in Geometry. (August 2021)

AMS Sectional Meeting, Special Session on Algebraic, Geometric & Topological Combinatorics. (September 2020)

The Dimension of an Amoeba

Scandinavian Gathering Around Remarkable Discrete Mathematics. (May 2019)

Georgia Tech Algebra Seminar. (January 2019)

Geometric Bijections of Graphs and Regular Matroids

CIRM Workshop on Combinatorial Geometries. (September 2018)

Institut Mittag-Leffler Seminar. (February 2018)

MIT Combinatorics Seminar. (October 2017)

Atlanta Lecture Series in Combinatorics and Graph Theory. (September 2017)

Brown University Discrete Math Seminar. (May 2017)

BIRS-CMO Workshop on Sandpile Groups. (November 2015)

Cornell Combinatorics and Discrete Geomtry Seminar. (April 2015)

At University of Oslo Mentoring

Undergraduate Project (MAT2000) of Trond Skaret Johansen EXPERIENCES Spring 23

At Brown University

2020 - 2021Senior Honor Thesis of Nathan Zelesko (Co-advising with Melody Chan)

TEACHING Lecturer at University of Copenhagen EXPERIENCES

Block 2 23-24 Invitation to Combinatorics

Lecturer at University of Oslo

Groups, Rings and Fields (Co-lecturing with Kris Shaw) Spring 22

Assistant at University of Bern Spring 19 Algorithms in Algebra

Fall 18 Mathematik I für Naturwissenschaften

Fall 18 Seminar: Tensors, Geometry and Applications

Instructor at Georgia Tech

Summer 18 Introduction to Discrete Mathematics

Fall 16 Grad Level Graph Theory (Co-lecturing with Robin Thomas)

Teaching Assistant at Georgia Tech

Fall 17 Introduction to Discrete Mathematics
Fall 16 Linear Algebra with Abstract Vector Spaces
Fall 15 Introduction to Discrete Mathematics

Fall 14 Honors Calculus II

Fall 13 Calculus II Fall 12 Calculus III

Other Teaching

Summer 14 Towards Diff. Geometry (Head Tutor of EPYMT at CUHK)

OTHER SERVICES

Referee for PNAS, Forum of Mathematics, Sigma, Journal of the LMS, SIAM Journal on Applied Algebra and Geometry, Combinatorial Theory, Combinatorica, Algebraic Combinatorics, European Journal of Combinatorics, Electronic Journal of Combinatorics, Discrete Mathematics, Discrete Applied Mathematics, and FPSAC International Conference.

Committee Member of the Major Exam of Changxin Ding (Brandeis, 2021).

Co-organizer of the minisymposium *Chip-firing and Tropical Curves* at the SIAM Conference on Applied Algebraic Geometry 2019.

Coordinator of the 57th International Mathematical Olympiad.