Chi Ho YUEN

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CONTACT
INFORMATION

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EMPLOYMENT

2021 – current	**University of Oslo**	
	Postdoctoral Fellow	
2019 – 2021	**Brown University**	
	Croucher Postdoctoral Fellow	
2018 – 2019	**University of Bern**	
	Postdoctoral Researcher	

EDUCATION

2012 – 2018	**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
2008 – 2012	**The Chinese University of Hong Kong**
	B.Sc. in Mathematics (First Class Honor)
	B.Eng. in Information Engineering (First Class Honor)

PUBLICATIONS

Eigenvalues and Critical Groups of Adinkras.
With Kevin Iga, Caroline Klivans, and Jordan Kostiuk.
Submitted. Preprint available at `https://arxiv.org/abs/2202.02821/`.

A Note on the Critical Groups of Strongly Regular Graphs and Their Generalizations.
With Kenneth Hung.
Submitted. Preprint available at `https://arxiv.org/abs/2203.11384/`.

Oriented Matroids from Triangulations of Products of Simplices.
With Marcel Celaya and Georg Loho.
Submitted. Preprint available at `https://arxiv.org/abs/2005.01787/`.

Patchworking Oriented Matroids.
With Marcel Celaya and Georg Loho.
Submitted. Preprint available at `https://arxiv.org/abs/2010.12018/`.

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 Spencer Backman and Francisco Santos.
Séminaire Lotharingien de Combinatoire **82B**, Art. 39, 12 pp, 2020.

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, 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
Awards and	2018 – 2019	Georgia 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 **The Critical Groups of Adinkras**

Brandeis Combinatorics Seminar. (November 2021)

Oriented Matroids from Triangulations of Products of Simplices

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

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

InterCity (Neuchâtel–Fribourg–Bern) Seminar. (February 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)

Mentoring **At Brown University**
Experiences 2020–2021 Senior Honor Thesis of Nathan Zelesko (Co-advising with Melody Chan)
Teaching
Experiences **Lecturer at University of Oslo**
Spring 22 Groups, Rings and Fields (for 1/3 of the course)
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*, *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.