

# Chi Cheuk Tsang

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## Education

- 2018 - present *PhD in Mathematics*, University of California, Berkeley  
Advisor: Ian Agol
- 2014 - 2018 *BSc in Mathematics, First Class Honours*, Chinese University of Hong Kong
- 2017 *Semester exchange program*, University of Waterloo

## Awards

- 2018 - 2021 Croucher Scholarship for Doctoral Study
- 2018 Simon Marais Mathematics Competition Individual 5th place
- 2015 - 2018 Hong Kong Jockey Club Scholarship

## Publications and Preprints

8. Chi Cheuk Tsang, “On the set of normalized dilatations of fully punctured pseudo-Anosov maps”, *In preparation*
7. Michael Landry and Chi Cheuk Tsang; “Endperiodic maps, splitting sequences, and branched surfaces”, *Preprint* (2023). arXiv:2304.14481
6. Eriko Hironaka and Chi Cheuk Tsang; “Standardly embedded train tracks and pseudo-Anosov maps with minimum expansion factor”, *Preprint* (2022). arXiv:2210.13418
5. Chi Cheuk Tsang; “Constructing Birkhoff sections for pseudo-Anosov flows with controlled complexity”, *Preprint* (2022). arXiv:2206.09586
4. Chi Cheuk Tsang; “Veering branched surfaces, surgeries, and geodesic flows”, *Preprint* (2022). arXiv:2203.02874
3. Ian Agol and Chi Cheuk Tsang; “Dynamics of veering triangulations: infinitesimal components of their flow graphs and applications”; *Algebraic and Geometric Topology*, to appear. arXiv:2201.02706
2. Ki Fung Chan, Spiro Karigiannis, and Chi Cheuk Tsang; “The LB-cohomology on compact torsion-free G2 manifolds and an application to “almost” formality”; *Annals of Global Analysis and Geometry* **55** (2019), 325-369. DOI: doi.org/10.1007/s10455-018-9629-x

1. Ki Fung Chan, Spiro Karigiannis, and Chi Cheuk Tsang; “Cohomologies on almost complex manifolds and the  $\partial\bar{\partial}$ -lemma”; *Asian Journal of Mathematics* **23** (2019), 561-584. DOI: doi.org/10.4310/AJM.2019.v23.n4.a2

## Selected talks

- 13 Apr 2023 Conference on Anosov Dynamics, Centre International de Rencontres Mathématiques, “Veering triangulations and Birkhoff sections”
- 20 Feb 2023 University of Wisconsin Dynamics Seminar, “Dilatations of pseudo-Anosov maps and standardly embedded train tracks”
- 3 Feb 2023 Caltech Geometry & Topology Seminar, “Fibrations, depth 1 foliations, and branched surfaces”
- 27 Sep 2022 Rutgers Geometry/Topology Seminar, “Fibrations, depth 1 foliations, and branched surfaces”
- 26 Apr 2022 Yale University Geometry and Topology Seminar, “Markov partitions for geodesic flows”
- 8 Apr 2022 Washington University in St. Louis Geometry and Topology Seminar, “Veering triangulations on Montesinos link complements”
- 3 Mar 2022 Geometric Topology Grad and Postdoc Seminar, “Veering triangulations and pseudo-Anosov flows”, Online
- 16 Nov 2021 Oklahoma State University Topology Seminar, “Markov partitions for geodesic flows”
- 9 Oct 2021 Special session on “Developments in Knot Theory and Low-dimensional Topology”, AMS Central Sectional Meeting, Online, “Veering triangulations and pseudo-Anosov flows”

## Selected conferences and workshops

- 10-14 Apr 2023 *Speaker*, Anosov Dynamics, Centre International de Rencontres Mathématiques
- 25-27 Feb 2022 *Participant*, Texas Geometry and Topology Conference, UT Dallas
- 9-10 Oct 2021 *Speaker*, Special session on “Developments in Knot Theory and Low-dimensional Topology”, AMS Central Sectional Meeting, Online
- 14-25 Jun 2021 *Participant*, Nearly Carbon Neutral Geometric Topology Conference, Online
- 9-11 Apr 2021 *Speaker*, Graduate Student Topology and Geometry Conference, Online
- 1-14 Jun 2020 *Participant*, Nearly Carbon Neutral Geometric Topology Conference, Online
- 27-30 Aug 2019 *Participant*, Current Progress in Low Dimensions, Centre de Recherches Mathématiques

## Service

- Fall 2021 - Spring 2023 Co-organizer of the student 3-manifold seminar, UC Berkeley
- Spring 2019 Organizer of Math 299 Reading course on Thurston’s notes

## Teaching

- Spring 2023 *Graduate student instructor*, Math 113 Introduction to Abstract Algebra, UC Berkeley
- Spring 2022 *Graduate student instructor*, Math 55 Discrete Mathematics, UC Berkeley
- Fall 2021 *Graduate student instructor*, Math 16A Analytic Geometry and Calculus, UC Berkeley
- Spring 2021 *Graduate student instructor*, Math 54 Linear Algebra and Differential Equations, UC Berkeley
- Fall 2020 *Graduate student instructor*, Math 53 Multivariable Calculus, UC Berkeley
- Fall 2019 *Graduate student instructor*, Math 53 Multivariable Calculus, UC Berkeley
- Spring 2019 *Graduate student instructor*, Math 1B Calculus, UC Berkeley
- Fall 2018 *Graduate student instructor*, Math 1A Calculus, UC Berkeley
- Summer 2018 *Head teaching assistant*, Enrichment Program for Young Mathematics Talent “Towards Modern Algebra”, Chinese University of Hong Kong
- Summer 2016 *Teaching assistant*, Enrichment Program for Young Mathematics Talent “Number Theory and Cryptography”, Chinese University of Hong Kong
- Summer 2015 *Teaching assistant*, Enrichment Program for Young Mathematics Talent “Towards Differential Geometry”, Chinese University of Hong Kong