Harrison Bray

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Teaching Experience

George Mason University

Spring 2021	Math 271: **Mathematics for Elementary Teachers I**. *Primary Instructor*. (Virtual, synchronous, two sections)
Fall 2020	Math 114: **Calculus II**. *Primary Instructor*. (Virtual, synchronous with asynchronous option)
Fall 2020	Math 271: **Mathematics for Elementary Teachers I**. *Primary Instructor*. (Virtual, synchronous)

Tufts University

Fall 2015	Math 36: **Applied Calculus II**. *Primary Instructor*.
Spring 2015	Math 19: **The Mathematics of Social Choice**. *Primary Instructor*.
Fall 2014	Math 19: **The Mathematics of Social Choice**. *Primary Instructor*.
Fall 2012 – Summer 2014	**Poincaré Institute for Mathematics Education**. *Online Course Moderator and Research Assistant*.

University of Michigan

Winter 2020	Math 440: **The Lab of Geometry at Michigan, LoGM**. *Primary Instructor and Course Creator*.
Fall 2019	Math 440: **The Lab of Geometry at Michigan, LoGM**. *Primary Instructor and Course Creator*.
Fall 2019	Math 217: **Linear Algebra with Introduction to Proof**. *Primary Instructor*.
Winter 2019	Math 217: **Linear Algebra with Introduction to Proof**. *Primary Instructor*. (Two sections)
Fall 2018	Math 217: **Linear Algebra with Introduction to Proof**. *Primary Instructor*. (Two sections)
Fall 2017	Math 217: **Linear Algebra with Introduction to Proof**. *Primary Instructor*. (Two sections)
Winter 2017	Math 310: **Explorations in Probability**. *Primary Instructor*.
Fall 2016	Math 490: **Introduction to Topology**. *Primary Instructor*.

Conferences, Seminars, Workshops, and Visits

Invited Presentations

23 Mar. 2021	**Topology and Geometry Seminar**. *Florida State University*. Tallahassee, FL. (virtual)

18 Nov. 2020	**Max Dehn Seminar**. *University of Utah*. Salt Lake City, UT. (virtual)
10 Apr. 2020	**Geometry and Topology Seminar**. *Columbia University*. New York, NY. (virtual)
18 Nov. 2019	**Geometry and Discrete Groups Seminar**. *Institute Hautes Études Scientifiques (IHES)*. Bures-sur-Yvette, France.
24 – 28 Jun. 2019	**Perspectives on convex projective geometry**. Sète, France.
4 – 6 Jun. 2019	**Boundaries of random walks**. *Bowdoin College*. Brunswick, ME.
27 – 31 May 2019	**Dynamics of group actions: a conference in the honor of Yves Benoist**. Cetraro, Italy.
11 Apr. 2019	**Geometric Group Theory Seminar**. *Ohio State University*. Columbus, OH.
16 – 19 Jan. 2019	**Joint Mathematics Meeting Special Session on Geometry Labs United: Research, Visualization, and Outreach**. Baltimore, MD.
30 Jul. – 3 Aug. 2018	**Conference on group actions and ergodic theory in geometry and topology**. *The Hamilton Mathematics Institute*. Dublin, Ireland.
30 Apr. 2018	**Dynamics seminar**. *University of Chicago*. Chicago, IL.
10 – 13 Jan. 2018	**Joint Mathematics Meeting Special Session: Boundaries for groups and spaces**. San Diego, CA.
2 May 2017	**Dynamical Systems Seminar**. *Northwestern University*. Evanston, IL.
22 Apr. 2017	**Junior Geometry and Topology in the Midwest Conference**. *University of Wisconsin*. Madison, WI.
13 Mar. 2017	**Geometry and Topology Seminar**. *University of Toronto*. Toronto, ON, Canada.
9 Feb. 2017	**Ergodic Theory/Probability Seminar**. *Ohio State University*. Columbus, OH.
28 Nov. 2016	**Complex Analysis, Dynamics, and Geometry seminar**. *University of Michigan*. Ann Arbor, MI.
4 Nov. 2016	**Howard University Mathematics Colloquium**. Washington, DC.
27 – 30 Oct. 2016	**Workshop in Dynamical Systems**. *Pennsylvania State University*. State College, PA.
2 – 11 Aug. 2016	**Minicourse on ergodic geometry in a nonuniformly hyperbolic setting**. *University of Maryland*. College Park, MD. (4 courses)
26 Apr. 2016	**Dynamics and Algebra seminar**. *Wesleyan University*. Middletown, CT.
15 Feb. 2016	**Dynamics seminar**. *University of Chicago*. Chicago, IL.
3 Dec. 2015	**Everytopic seminar**. *Brandeis University*. Waltham, MA.
31 Oct. 2015	**Midwest Dynamical Systems Meeting**. *Ohio State University*. Columbus, OH. (poster)
21 Feb. 2015	**Graduate Student Math Conference**. *Brown University*. Providence, RI.
12 May 2014	**IRMA Master Class: student-postdoc seminar**. *University of Strasbourg*. Strasbourg, France.
31 Mar. 2014	**School on Geometry and Dynamics**. *Centre International de Rencontres Mathématiques (CIRM)*. Luminy, France. (poster)
28 Mar. 2014	**Séminaire Teich**. *Aix-Marseille University*. Marseille, France.

Conferences Attended

15 – 17 Apr. 2016	**Workshop on Dynamical Systems and Related Topics**. *University of Maryland*. College Park, MD.
Apr. 2014	**Finsler Geometry and Applications**. *Galatasaray University*. Istanbul, Turkey.
29 Nov. 2013	**Young Mathematicians in Dynamical Systems**. *Centre International de Rencontres Mathématiques (CIRM)*. Luminy, France.
4 – 7 Oct. 2018	**Workshop in Dynamical Systems and Related Topics**. *Pennsylvania State University*. State College, PA.
12 – 13 Aug. 2017	**Geometry Labs United**. *University of Washington*. Seattle, WA.
18 – 24 Jun. 2017	**Mathematical Research Community Workshop on Dynamical Systems: Smooth, Symbolic, and Measurable**. Snowbird Resort, UT.
15 – 19 Aug. 2016	**Workshop on Moduli Spaces of Geometric Structures**. *Institute for Mathematical Sciences*. Singapore.
22 – 24 Jun. 2016	**Geometries, surfaces and representations of fundamental groups**. *University of Maryland*. College Park, MD.
7 – 11 Mar. 2016	**Fractal Geometry, Hyperbolic Dynamics and Thermodynamical Formalism**. *Institute for Computational and Experimental Research in Mathematics (ICERM)*. Providence, RI.
6 – 9 Jan. 2016	**Joint Mathematics Meetings**. Seattle, WA.
14 – 15 Nov. 2015	**AMS Fall Eastern Sectional Meeting**. *Rutgers University*. New Brunswick, NJ.
19 Sep. 2015	**Women In Mathematics In New England (WiMiN)**. *Smith College*. Northampton, MA.
15 – 16 Jan. 2015	**MSRI Connections for Women: Dynamics on Moduli Spaces of Geometric Structures**. *Mathematical Sciences Research Institute (MSRI)*. Berkeley, CA.
20 – 23 Jan. 2015	**MSRI Introductory Workshop: Dynamics on Moduli Spaces of Geometric Structures**. *Mathematical Sciences Research Institute (MSRI)*. Berkeley, CA.
4 – 14 Jun. 2014	**ICTP-NLAGA School in Dynamical Systems and Ergodic Theory**. *African Institute for Mathematical Sciences (AIMS)*. Dakar, Senegal.
9 – 17 May 2014	**IRMA Master Class: Around Thurston-Grothendieck-Teichmüller theories**. *University of Strasbourg*. Strasbourg, France.
20 – 24 Jan. 2014	**Young Researchers in Geometric Groupy Theory**. *Centre International de Rencontres Mathématiques (CIRM)*. Luminy, France.
2 – 6 Dec. 2013	**Hyperbolicity and Dimension**. *Centre International de Rencontres Mathématiques (CIRM)*. Luminy, France.
27 May – 6 Jun. 2013	**Beyond Uniform Hyperbolicity**. Będlewo, Poland.

Seminars Attended

Sep. 2016 – May 2020	**RTG working seminar on geometry, topology, and dynamics**. *University of Michigan*. Ann Arbor, MI.
Sep. 2016 – May 2020	**Topology seminar**. *University of Michigan*. Ann Arbor, MI.

Sep. 2014 – May 2016	**Geometric Group Theory and Topology Seminar**. *Tufts University*. Medford, MA.
Feb. – Apr. 2014	**Séminaire: Dynamique, Arithméthique et Combinatoire**. *Institut de Mathématiques de Marseille*. Marseille, France.
Jan. – Apr. 2014	**Séminaire: Teich**. *Aix-Marseille University*. Marseille, France.
Sep. 2012 – Dec. 2013	**Dynamics Seminar**. *Tufts University*. Medford, MA.
Spring 2013	**Working seminar on Ergodic Geometry**. *Tufts University*. Medford, MA.

Invited Visits

Nov. 2019	**Invited Guest**. *Institute Hautes Études Scientifiques (IHES)*. Bures-sur-Yvette, France.
Jan. – Apr. 2014	**Invited Guest**. *Centre International de Rencontres Mathématiques (CIRM)*. Luminy, France.

Pedagogical Training

Spring 2021 – present	**Teaching Seminar**. *George Mason University*. Department of Mathematical Sciences. Fairfax, VA.
Winter 2018 – Winter 2020	**Learning Community on Inclusive Teaching (LCIT)**. *University of Michigan*. Department of Mathematics. Ann Arbor, MI.
Fall 2016 – Spring 2020	**Inquiry Based Learning (IBL) working seminar**. *University of Michigan*. Department of Mathematics. Ann Arbor, MI.
Summer 2016, Summer 2017	**Inquiry Based Learning (IBL) Workshop**. *University of Michigan*. Department of Mathematics. Ann Arbor, MI.
	The annual three day IBL workshop consists of observing and analyzing an inquiry-based learning (IBL) classroom and discussing IBL-style instructional practices.
Summer 2016	**Michigan Teaching Training**. *University of Michigan*. Department of Mathematics. Ann Arbor, MI.
	The University of Michigan has an extensive teacher training program for new hires, run by the mathematics department in conjunction with the Michigan Center for Research on Learning and Teaching (CRLT).
Spring – Fall 2016	**Graduate Institute for Teaching (GIFT)**. *Tufts University*. Graduate School of Arts and Sciences. Medford, MA.
	The Tufts Graduate Student Institute for Teaching (GIFT) awards fellowships on a competitive basis across all fields of scholarship at Tufts. Teaching fellows participate in an intensive summer workshop on pedagogy before working with a faculty mentor in the classroom the following semester.

Memberships

American Mathematical Society (AMS)