

RYLEE ALANZA LYMAN

CONTACT	Tufts University Mathematics 503 Boston Ave Medford, MA 02155	<i>E-mail:</i> rylee.lyman@tufts.edu <i>Mobile:</i> 952.465.6895 <i>Webpage:</i> https://ryleealanza.org
INTERESTS	My interests are in the fields of geometric group theory, CAT(0) and hyperbolic geometry, and low-dimensional topology. In my thesis I study outer automorphisms of free products of finite groups, as well as geometric and topological properties of naturally-associated spaces and complexes they act on.	
EDUCATION	Tufts University , PhD in Mathematics (Advisor: Kim Ruane) Tufts University , MS in Mathematics Columbia University , BA in Mathematics (honors) & Music, <i>cum laude</i>	<i>expected</i> May 2020 May 2017 May 2015
RESEARCH	Train Tracks, Orbigraphs and CAT(0) Free-By-Cyclic Groups <i>Submitted.</i> Available at: arXiv:1909.03097 [Math.GR] Doubly-Uniform Exponential Growth for Free-By-Cyclic Groups (with Robert Kropholler and Thomas Ng) <i>In preparation.</i> Out(F_∞) and Big Mapping Class Groups (with Santana Afton) <i>In preparation.</i>	
FUTURE INVITED TALKS	Special Session, AMS Sectional Meeting <i>Combinatorial Methods in Geometric Group Theory,</i> University of Virginia at Charlottesville Special Session, AMS Sectional Meeting <i>Subgroups in Nonpositive Curvature,</i> Tufts University Dynamics, Geometry and Groups Seminar Queens University	Mar 2020 Mar 2020 Spring 2020
CONFERENCE & SEMINAR TALKS	Special Session, AMS Sectional Meeting <i>Effective and Quantitative Advances in Low Dimensional Topology</i> <i>and Geometric Group Theory,</i> Binghamton University Algebra/Topology Seminar State University of New York at Albany Graduate Seminar Temple University Geometry and Topology Seminar Temple University LG&TBQ University of Michigan Graduate Student Conference in Algebra, Geometry and Topology Temple University Spring Topology and Dynamical Systems Conference University of Alabama at Birmingham Geometric Group Theory and Topology Seminar Tufts University Eminar Tufts Student Seminar, 6 talks	Oct 2019 Oct 2019 Sep 2019 Sep 2019 June 2019 June 2019 Mar 2019 Nov 2018 2017–2019

CONFERENCE PARTICIPATION	Workshop on Polyhedral Products in Geometric Group Theory Fields Institute, University of Toronto	May 2020
	RTG Mini-Conference University of Utah	Feb 2020
	Tech Topology Conference <i>Lightning Talk</i> , Georgia Institute of Technology	Dec 2019
	Algorithms in Complex Dynamics and Mapping Class Groups ICERM, Brown University	Nov 2019
	Junior Geometry and Topology in the Midwest University of Wisconsin at Madison	Oct 2019
	Wasatch Topology Conference University of Utah, Brigham Young University	Aug 2019
	Aspects of Geometric Group Theory Institut des Hautes Études Scientifiques	July 2019
	Young Geometric Group Theory VIII <i>Lightning Talk</i> , Colegio Mayor Miguel de Unamuno	July 2019
	Spring Opportunities Workshop American Institute of Mathematics	Apr 2019
	Graduate Student Topology and Geometry Conference <i>Lightning Talk</i> , University of Illinois at Urbana-Champaign	Mar 2019
	Junior Geometry and Topology in the Midwest University of Wisconsin at Madison	Oct 2018
	Women and Mathematics Program Institute for Advanced Study	May 2016
TEACHING	Head Teaching Assistant	AY 2019–20
	Co-organizer, Graduate Development Seminar	AY 2019–20
	Instructor of Record, Math of Social Choice, Tufts University	Spring 2019, Summer 2019
	Recitation Leader, Calculus I, Tufts University	Fall 2019
	Recitation Leader, Calculus II, Tufts University	Spring 2017, Spring 2018, Fall 2018
SERVICE	Co-organizer, Tufts Directed Reading Program	AY 2018–20
	Mentor, Tufts Directed Reading Program	Fall 2019
	Organizer, Geometric Group Theory Reading Seminar	AY 2019–20
	Treasurer, Tufts Organization of Graduate Students in Mathematics	AY 2018–19
	Mathematics Department Graduate Union Steward	AY 2017–19
	Mathematics Department Representative, Tufts Graduate Student Council	AY 2017–18
	Graduate Student Member, Tufts Committee on Curricula	AY 2017–18
	Mentor, Tufts Directed Reading Program	Summer 2016
REFERENCES	Kim Ruane (Advisor)	kim.ruane@tufts.edu
	Mladen Bestvina	bestvina@math.utah.edu
	Mark Hagen	mark.hagen@bristol.ac.uk
	Robert Kropholler	robert.kropholler@tufts.edu
	Zachary Faubion (Teaching reference)	zachary.faubion@tufts.edu
OTHER	Languages: English (native), German (intermediate), Japanese (intermediate)	
	Citizenship: United States of America	