Rylee Alanza Lyman

Contact	Tufts University Mathematics 503 Boston Ave Medford, MA 02155	E-mail: rylee.lyman@tufts.edu Mobile: 952.465.6895 Webpage: 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 Ru	ane) expected May 2020	
	Tufts University, MS in Mathematics	May 2017	
	Columbia University, BA in Mathematics (honors) & Ma	usic, cum laude May 2015	
Research	Train Tracks, Orbigraphs and CAT(0) Free-By-Cyclic Groups Submitted. Available at: arXiv:1909.03097 [Math.GR]		
	Doubly-Uniform Exponential Growth for Free-By-Cyclic Groups (with Robert Kropholler and Thomas Ng) In preparation.		
	Out(F_{∞}) and Big Mapping Class Groups (with Santana Afton) <i>In preparation</i> .		
Future Invited Talks	Special Session, AMS Sectional Meeting Combinatorial Methods in Geometric Group Theory, University of Virginia at Charlottesville	Mar 2020	
	Special Session, AMS Sectional Meeting Subgroups in Nonpositive Curvature, Tufts University	Mar 2020	
	Geometric Group Theory Seminar McGill University	Jan 2020	
	Dynamics, Geometry and Groups Seminar Queens University	Jan 2020	
	Boston Topology Seminar Brandeis University	Jan 2020	
Conference & Seminar Talks	Special Session, AMS Sectional Meeting Effective and Quantitative Advances in Low Dimension and Geometric Group Theory, Binghamton University		
	Algebra/Topology Seminar State University of New York at Albany	Oct 2019	
	Graduate Seminar Temple University	Sep 2019	
	Geometry and Topology Seminar Temple University	Sep 2019	
	LG&TBQ University of Michigan	June 2019	
	Graduate Student Conference in Algebra, Geometry ar Temple University	nd Topology June 2019	
	Spring Topology and Dynamical Systems Conference University of Alabama at Birmingham	Mar 2019	
	Geometric Group Theory and Topology Seminar Tufts University	Nov 2018	
	Eminar Tufts Student Seminar, 6 talks	2017–2019	

Conference Participation	Workshop on Polyhedral Products in Geometric Group Theory	May 2020
FARTICIPATION	Fields Institute, University of Toronto RTG Mini-Conference University of Utah	Feb 2020
	University of Utah 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 Lightning Talk, Colegio Mayor Miguel de Unamuno	July 2019
	Spring Opportunities Workshop American Institute of Mathematics	Apr 2019
	Graduate Student Topology and Geometry Conference Lightning Talk, 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 Mathematic	s 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 (int	ermediate)
	Citizenship: United States of America	
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