Rylee Alanza Lyman

Contact	Tufts University Mathematics 503 Boston Ave	E-mail: rylee.lyman@tufts.edu Mobile: 952.465.6895	
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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) & M	usic, cum laude May 2015	
Research	Train Tracks, Orbigraphs and CAT(0) Free-By-Cyclic C Submitted. Available at: arXiv:1909.03097 [Math.Gl		
	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> .		
Conference & Seminar Talks	Special Session, AMS Sectional Meeting Combinatorial Methods in Geometric Group Theory, University of Virginia at Charlottesville	Mar 2020	
	Special Session, AMS Sectional Meeting Effective and Quantitative Advances in Low Dimension and Geometric Group Theory, Binghamton University	, 00	
	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	
	Young Geometric Group Theory VIII Lightning Talk, Colegio Mayor Miguel de Unamuno	July 2019	
	LG&TBQ University of Michigan	June 2019	
	Graduate Student Conference in Algebra, Geometry ar Temple University	d Topology June 2019	
	Graduate Student Topology and Geometry Conference Lightning Talk, University of Illinois at Urbana-Cha		
	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	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	
	Spring Opportunities Workshop American Institute of Mathematics	Apr 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 Progrm	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 Co	ouncil 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		