

RYLEE ALANZA LYMAN

CONTACT	Department of Mathematics and Computer Science Smith Hall, Rutgers University at Newark Newark, NJ 07102	<i>E-mail:</i> rylee.alanza@gmail.com <i>Mobile:</i> 952.465.6895 <i>Webpage:</i> https://ryleealanza.org
INTERESTS	Geometric group theory, geometric topology, outer automorphism groups, mapping class groups, Coxeter groups, deformation spaces of group actions, hyperbolic and CAT(0) geometry.	
APPOINTMENTS	Rutgers University at Newark , Postdoctoral Associate	2020–2023
EDUCATION	Tufts University , PhD in Mathematics (Advisor: Kim Ruane)	May 2020
	Tufts University , MS in Mathematics	May 2017
	Columbia University , BA in Mathematics (honors) & Music, <i>cum laude</i>	May 2015
RESEARCH	Extensions of Hyperbolic Groups Have Locally Uniform Exponential Growth <i>Submitted.</i> (with Robert Kropholler and Thomas Ng) Available at arXiv:2012.14880 [Math.GR]	
	Folding-like Techniques for CAT(0) Cube Complexes <i>Submitted.</i> (with Michael Ben-Zvi and Robert Kropholler) Available at arXiv:2011.05374 [Math.GR]	
	Some New CAT(0) Free-by-Cyclic Groups <i>To appear in the Michigan Math Journal.</i> Available at: arXiv:1909.03097 [Math.GR]	
	Nielsen Realization for Infinite-Type Surfaces <i>To appear in Proceedings of the AMS.</i> (with S. Afton, D. Calegari and L. Chen) Available at arXiv:2002.09760 [Math.GT]	
	Train Tracks on Graphs of Groups and Outer Automorphisms of Hyperbolic Groups <i>PhD thesis.</i> Available at arXiv:2005.00164 [Math.GR]	
	Train Track Maps and CTs on Graphs of Groups <i>In preparation.</i>	
	Robert P. Guertin Student Leadership Award finalist	2020
	Head Teaching Assistant	AY 2019–20
CONFERENCE & SEMINAR	Random and Arithmetic Structures in Topology Seminar Mathematical Sciences Research Institute	Dec 2020
TALKS	Geometry and Topology Seminar City University of New York	Nov 2020
	Geometry and Topology Seminar Binghamton University	Oct 2020
	Pure Math Seminar University of North Carolina–Greensboro	Oct 2020
	Big Surf(aces) Seminar	Oct 2020
	Mathematics Colloquium Rutgers University–Newark	Sep 2020
	Geometric Group Theory without Boundaries Mini-course on Bass–Serre Theory	July 2020
	Trends in Low-Dimensional Topology	June 2020
	Geometry and Topology Online Warwick Mathematics Institute	June 2020
	Topology Seminar University of California Riverside	May 2020
	Geometric Topology Seminar Columbia University	Apr 2020
	Topology Seminar University of Wisconsin at Milwaukee	Mar 2020
	Pick My Brain Seminar Northeastern University	Feb 2020

	Geometric Group Theory Seminar McGill University	Jan 2020
	Hyperbolic Lunch University of Toronto	Jan 2020
	Dynamics, Geometry and Groups Seminar Queens University	Jan 2020
	Boston Topology Seminar Brandeis University	Jan 2020
	Special Session, AMS Sectional Meeting <i>Effective and Quantitative Advances in Low Dimensional Topology and Geometric Group Theory</i> , Binghamton University	Oct 2019
	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 and Topology Temple University	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	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
	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
TEACHING		

SERVICE	Co-organizer, Geometric Group Theory Without Boundaries Summer School	July 2020
	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	