

CONTACT INFORMATION	Brigham Young University Mathematics Department TMCB 288	<i>E-mail:</i> curt kent@math.byu.edu <i>Website:</i> http://math.byu.edu/~curtkent/
RESEARCH INTERESTS	Geometric group theory, Low-dimensional topology	
ACADEMIC POSITIONS	Brigham Young University Associate Professor Assistant Professor	Sept 2022 - present Aug 2016 - Aug 2022
	New York University Postdoctoral Associate, Courant Institute of Mathematics • Advisor: Robert Young	Sept 2014 - Aug 2016
	University of Toronto Postdoctoral Fellowship, Department of Mathematics • Advisor: Robert Young	July 2013 - Aug 2014
EDUCATION	Vanderbilt University Ph.D. Mathematics • Dissertation Topic: <i>Topological properties of asymptotic cones of finitely generated groups</i> • Advisor: Mark Sapir	Aug 2008 - May 2013
	Brigham Young University M.S. in Mathematics B.S. graduated Cum Laude	Aug 2006 - May 2008 Aug 2002 - May 2006
ACCEPTED AND PUBLISHED PAPERS	<ol style="list-style-type: none"> 1. Conner, Gregory R.; Herfort, Wolfgang; Kent, Curtis; and Pavešić, Petar. <i>Inverse limit slender</i>. (Accepted for publication in <i>Fundamenta Mathematica</i>.) 2. Conner, Gregory R.; and Kent Curtis. <i>Peano dimension of fundamental groups</i>. <i>Topology and its Applications</i> 308 (2028), 108002. 3. Kent, Curtis. <i>Homotopy type of planar continua</i>. <i>Adv. Math.</i>, (2021), 391:107971. 4. Conner, Gregory R.; Herfort, Wolfgang; Kent, Curtis; Pavešić, Petar. <i>Uncountable groups and the geometry of inverse limits of coverings</i>. <i>Topology and its Applications</i> 300 (2021), 107769. 5. Kent, Curtis and Ricks, Russell. <i>Asymptotic cones and boundaries of $CAT(0)$ spaces</i>. <i>Indiana University Mathematics Journal</i> 70:4 (2021). 6. Conner, Gregory R.; Herfort, Wolfgang; Kent, Curtis; Pavešić, Petar. <i>Generating the inverse limit of free groups</i>. <i>J. Algebra</i> 578 (2021), 371–401. 7. Conner, Gregory and Kent, Curtis. <i>Fundamental groups of locally connected subsets of the plane</i>. <i>Adv. Math.</i>, (2019), 347:384–407. 8. Conner, Gregory R.; Herfort, Wolfgang; Kent, Curtis; Pavešić, Petar; <i>Recognizing the second derived subgroup of free groups</i>. <i>J. Algebra</i> 516 (2018), 396–400. 9. Kent, Curtis. <i>Homomorphisms of fundamental groups of planar continua</i>. <i>Pacific J. Math.</i> 295 (2018), no. 1, 43–55. 10. Coulon, R��mi; Hull, Michael; and Kent, Curtis. <i>A Cartan-Hadamard type result for relatively hyperbolic groups</i>. <i>Geom. Dedicata</i> 180 (2016), p. 339–371. 	

11. Kent, Curtis. *Asymptotic cones of HNN extensions and amalgamated products*. Algebraic & Geometric Topology 14 (2014), p. 551-595.
12. Conner, Gregory and Kent, Curtis. *Local topological properties of asymptotic cones of groups*. Algebraic & Geometric Topology 14 (2014), p. 1413-1439.
13. Conner, Gregory and Kent, Curtis. *Inverse limits of finite rank free groups*. J. Group Theory 15 (2012), no. 6, p. 823-829.

SUBMITTED PAPERS 1. Conner, Gregory R.; Herfort, Wolfgang; Kent, Curtis; and Pavešić, Petar. *Inverse limits of covering spaces*. (Submitted for publication in *Pacific Journal of Mathematics*.)

PAPERS IN PREPARATION Kent, Curtis and Ricks, Russell. *Some features of $CAT(0)$ spaces that are detected by each and every asymptotic cone*.

Conner, Gregory R.; and Kent, Curtis. *Residually finite groups are slender*.

Conner, Gregory R.; Herfort, Wolfgang; Kent, Curtis; and Pavešić, Petar. *Splittings the homology of Peano continua*.

Kent, Curtis; McGrath, Matthew. *Stable chromatic number of the plane*.

GRANTS/FUNDING	Simons Collaborative Grant 2018-2023	\$42,000
	2019 NSF Conference Grant	\$19,600 Conference grant
	GEAR Conference Grant	\$23,400 Conference grant
	MSRI - Workshop on Groups acting on $CAT(0)$ spaces	Travel support
	New York University - 2014-2016	Postdoctoral Fellowship
	University of Toronto - 2013-2014	Postdoctoral Fellowship
	Second Junior Gear Retreat 2014	Travel Support
	AMS Joint Meetings 2014	Travel Support
	Topology and Groups Conference - Berlin 2012	Travel Support
	Vanderbilt University 2012	Travel grant
	American Mathematical Society 2012	Travel Support
	MSRI/PCMI Geometric Group Theory - Park City, UT 2012	Travel Support
	American Mathematical Society 2011	Travel Support
	Dubrovnik VII Geometric Topology Conference 2011	Travel Support
	GAGTA- Montreal Canada 2010	Travel Support
	Cornell Topology Festival 2010	Travel Support
	Vanderbilt University - 2008-2013	Teaching Assistantship
	Brigham Young University - 2006-2007	Teaching Assistantship

PRESENTATIONS
TALKS

- 2022 55th Spring Topology and Dynamics Conference. Waco, Texas. March 9-12, 2022. *Splittings of the homology of Peano continua.*
- 2021 Workshop in Geometric Topology. Virtual. June 2021. *Lacunary properties of $CAT(0)$ groups/spaces*
- 2020 Nearly Carbon Neutral Geometric Topology (NCNGT) conference. Virtual. June 1-14, 2020 *Inverse limits of covering spaces.*
- 2019 Geometric and Asymptotic Group Theory with Applications. Tel Aviv, Israel. May 26-30, 2019. *Metrics on fundamental groups.*
- Justus-Liebig-Universität Gießen Group Theory seminar. Gießen, Germany. May 16, 2019. *Asymptotic cones of groups.*
- Arches Topology Conference. Springdale, UT. April 24-27, 2019. *Oscillatory geodesics in the plane.*
- 53rd Annual Spring Topology and Dynamical Systems Conference. Birmingham, Alabama. March 14-16, 2019. *Asymptotic cones and Tits boundaries*
- 33rd Summer Conference on Topology and its Applications. Bowling Green, KY. July, 17-20 2018. *Homotopy type of planar Peano continua.*
- Non-positively Curved Groups on the Mediterranean. Nasholim, Israel. May, 23-29 2018. *Tits boundaries of $CAT(0)$ groups.*
- Moab Topology Conference. Moab, UT. May, 7-10 2018. *Homotopy dimension and type of planar continua.*
- Binghamton University Graduate Conference in Algebra and Topology. Binghamton, NY. Oct, 14-15 2017. *Asymptotic cones and boundaries of $CAT(0)$ groups.*
- 2017 Young Geometric and Asymptotic Group Theory with Applications. Bilbao, Spain. June 26-30, 2017. *Asymptotic cones and boundaries of $CAT(0)$ groups.*
- 2017 South Eastern Logic Symposium, Gainesville, FL. Mar 4-5, 2017. *Fundamental groups of planar continua.*
- 2016 Wasatch Topology Conference. Midway, UT. Aug 8-10, 2016. *Asymptotic cones and boundaries of $CAT(0)$ groups.*
- 2015 Geometric Group Theory on the Gulf Coast. South Padre Island, TX. March 26-29, 2015. *Cut-points in asymptotic cones.*
- Geometry & Topology Seminar. University of Toronto; Toronto, Canada. November 4, 2013. *Topological properties of asymptotic cones.*
- 2012 Spring Southeastern AMS Sectional Meeting. University of South Florida; Tampa, FL. March 10-11, 2012. *Homotopy properties of asymptotic cones of groups.*
- Topology & Group Theory Seminar. Vanderbilt University; Nashville, TN. February 22, 2012. *Understanding fundamental groups of asymptotic cones.*
- 2011 Fall Eastern AMS Sectional Meeting. Cornell University; Ithaca, NY. September 10-11, 2011. *Local homotopy properties of asymptotic cones of groups.*
- Summer School: Filling invariants and asymptotic geometry. Indiana University; Bloomington, IN. July 24-29, 2011. *Asymptotic cones: definitions, examples, and properties.*
- Workshop on Topology of Wild Spaces and Fractals. Bundesinstitut für Erwachsenenbildung St. Wolfgang; Strobl, Austria. July 4 - 8, 2011. *Local homotopy properties of asymptotic cones.*

Topology & Group Theory Seminar. Vanderbilt University, Nashville, TN. March 2, 2011. *Asymptotic cones of groups*.

Annual Spring Research Conference. Brigham Young University. April 2008. *Oscillatory geodesics in planar Peano continua*.

Topology Seminar. University of Ljubljana; Ljubljana Slovenia. March 2006. *Homomorphisms of the fundamental group of planar and one-dimensional Peano continua*.

OTHER
CONFERENCES
ATTENDED

2022 Joint Mathematics Meeting. Boston, MA. Jan 3-7, 2022.

2019 Wasatch Topology Conference. Midway, UT. Aug 14-16, 2019.

Conference on Non-positive curvature. Warsaw, Poland. Jun 20-24, 2019.

Arches Topology Conference. Springdale, UT. Apr 24-27, 2019.

2018 Wasatch Topology Conference. Midway, UT. Aug 15-17, 2018.

2017 Geometric and Asymptotic Group Theory with Applications. University of the Basque Country. Bilbao, Spain. July 3-7, 2017.

34th Annual Workshop in Geometric Topology. Brigham Young University. Provo, Utah. June 8-10, 2017.

Conference on geometric and combinatorial methods in group theory. University of Illinois at Urbana-Champaign. Urbana, Illinois. May 16-18, 2017. (Conference organizer.)

Geometric and Asymptotic Group Theory with Applications. Stevens Institute of Technology. Hoboken, New Jersey. June 13- 17, 2016.

MSRI: Groups acting on $CAT(0)$ spaces workshop. University of California, Berkeley. Berkeley, California. September 27-30, 2016.

Geometric and Asymptotic Group Theory with Applications. Stevens Institute of Technology. Hoboken, New Jersey. June 13- 17, 2016.

Hyperbolic groups and their representations. Universidad de la República. Montevideo, Uruguay. March 31 - April 8, 2016.

Topology Festival. Cornell University. Ithaca, New York. May 8 - 10, 2015.

Geometric Group Theory on the Gulf Coast. South Padre Island, TX. March 26-29, 2015.

What's next? The mathematical legacy of Bill Thurston. Cornell University. Ithaca, New York. June 23-27, 2014.

PCMI: Graduate Summer School. Park City Mathematics Institute. Park City, Utah. July 1-21, 2012.

Topology and Groups: Summer School and Conference. Freie Universität. Berlin, Germany. June 18-29, 2012.

Dubrovnik VII - Geometric Topology. Inter-University Centre, Dubrovnik, Croatia. June 26 - July 3, 2011.

Geometric, Asymptotic, Combinatorial Group Theory with Applications. Centre de Recherches Mathématique. Montreal, Canada. August 15-19, 2010.

Topology Festival. Cornell University, Ithaca, NY. May 7 - 10, 2010.