

Priyam Patel

CONTACT INFORMATION	Department of Mathematics University of California, Santa Barbara Santa Barbara, CA 93106	<i>E-mail:</i> patel@math.ucsb.edu <i>Mobile:</i> (201) 388-2225 <i>Webpage:</i> www.patelp.com
RESEARCH INTERESTS	My research interests lie in the fields of low-dimensional topology, hyperbolic geometry, and geometric group theory. In particular, I study hyperbolic manifolds, the mapping class groups of surfaces (of both finite and infinite type), separability properties of groups, right-angled Artin groups, cube complexes, Teichmüller theory, the combinatorics of 3-manifolds, and representations of surface and 3-manifold groups.	
POSITIONS	University of California, Santa Barbara , Visiting Assistant Professor Purdue University , Golomb Visiting Assistant Professor	2016–present 2013–2016
EDUCATION	Rutgers University, New Brunswick , Ph.D. in Mathematics (Advisor: Feng Luo) New York University , B.A. in Mathematics (Magna Cum Laude with Honors)	May 2013 May 2008
AWARDS & GRANTS	NSF Grant DMS-1812014: The Covers, Symmetries, and Combinatorics of Manifolds AWM Travel Grant AIM Workshop Grant "Surfaces of infinite type" AMS-Simons Travel Grant Spira Teaching Award for Excellence in Undergraduate Teaching National Society for Collegiate Scholars Inspiring Integrity Award Purdue Favorite Faculty Award GAANN Fellowship for Graduate Studies in Mathematics Rutgers University, Teaching Excellence Award	2018-2021 2018 2018 2015–2017 2016 2016 2015 2011 & 2008 2011
PUBLISHED PAPERS	Algebraic and topological properties of big mapping class groups <i>Algebr. Geom. Topol.</i> (<i>Accepted</i>) (with N.G. Vlamis) Building hyperbolic metrics suited to closed curves and applications to lifting simply <i>Math. Res. Lett.</i> 24 (2017), no. 3, p. 593-617. (with T. Aougab, J. Gaster, and J. Sapir) Zariski closures and subgroup separability <i>Selecta Math.</i> 23 (2017), Issue 3, p. 2019-2027. (with L. Louder and D.B. McReynolds) Quantifying separability in virtually special groups <i>Pacific J. Math.</i> 284-1 (2016), p. 103-120. (with M.F. Hagen) On the residual finiteness growths of particular hyperbolic manifold groups <i>Geom. Dedicata.</i> 185 (2016), Issue 1, p. 87-103. Residual finiteness growths of virtually special groups <i>Math. Z.</i> 279 (2015), no. 1-2, p. 297-310. (with K. Bou-Rabee and M.F. Hagen) On a theorem of Peter Scott <i>Proc. Amer. Math. Soc.</i> 142 (2014), p. 2891-2906.	
PREPRINTS	Covers of surfaces, Kleinian groups, and the curve complex (with T. Aougab and S. Taylor) Available at: arXiv:1810.12953 [math.GT] Effective virtual and residual properties of some arithmetic hyperbolic 3-manifolds (with J. Deblois and N. Miller) Available at: arXiv:1806.02360 [math.GT] The first integral cohomology of pure mapping class groups (with J. Aramayona and N.G. Vlamis) Available at: arXiv:1711.03132 [math.GT]	

MENTORING	Mark Pengitore, Ph.D. student at Purdue University (advisor: Ben McReynolds)	2013–2016
	Milana Golich, undergraduate student at Purdue University	2014–2016
UPCOMING INVITED TALKS	Classical and quantum 3-manifold topology , Melbourne, Australia	Dec 2018
	5th Annual Graduate Student Conference in Algebra, Geometry, and Topology , Temple University	Jun 2019
	Combinatorial and algebraic aspects of geometric structures , Chiang Mai, Thailand	Jul 2019
PAST INVITED TALKS (CONFERENCES & COLLOQUIA)	Geodesics on real hyperbolic manifolds , Connecticut College	Aug 2018
	Thin groups in Number Theory, Geometry and Topology , Rice University	May 2018
	Geometry of Teichmüller space and mapping class groups , University of Warwick	Apr 2018
	Graduate Student Topology and Geometry Conference , UIC	Apr 2018
	Mathematical Congress of the Americas , Special Session on Geometric Group Theory	Jul 2017
	Shanks Conference on Low-dimensional Topology and Geometry , Vanderbilt	May 2017
	Redbud Geometry/Topology Conference , University of Arkansas	Apr 2017
	AWM Research Symposium	Apr 2017
	<i>Special session on Geometric Group Theory</i> , UCLA	
	Spring Topology and Dynamics Conference	Mar 2017
	<i>Special session on Geometric Group Theory</i> , NJCU	
	Bowdoin College Colloquium	Jan 2017
	Louisiana State University Colloquium	Jan 2017
	University of Fribourg Colloquium	Dec 2016
	Temple University Colloquium	Nov 2016
	Effective and Algorithmic Methods in Hyperbolic Geometry and Free Groups	May 2016
	Women and Math Research Seminar Series , Institute for Advanced Study	May 2016
	Eastern Illinois Geometry, Dynamics and Topology Conference	Apr 2016
	Bloomington Geometry Workshop	Apr 2016
	Sectional AMS Meeting Special Session	Nov 2015
	<i>Geometry of groups, surfaces and 3-manifolds</i> , Rutgers University	
	Wasatch Topology Conference , Park City, UT	Aug 2015
	Sectional AMS Meeting Special Session	Mar 2015
	<i>Interactions Between Geometry, Group Theory & Number Theory</i> , Michigan State University	
	Sectional AMS Meeting Special Session	Mar 2015
	<i>Geometric Group Theory and Topology</i> , University of Alabama	
	Third Annual Midwest Women in Mathematics Symposium Special Session	Mar 2015
<i>Algebraic and Geometric Topology</i> , Dominican University		
Geometry, Groups and Dynamics , Rose-Hulman Institute	Feb 2015	
Young Geometric Group Theory in the Midwest , Madison, WI	Nov 2014	
Topology Students Workshop Research Talk, Georgia Tech	Jun 2014	
Geometric Groups on the Gulf Coast Conference	Mar 2013	
Joint Meetings of the AMS Special Session	Jan 2013	
<i>Topics in geometric and analytic methods in Teichmüller theory and hyperbolic geometry</i>		

PAST
INVITED TALKS
(SEMINARS)

University of Washington Rainwater Seminar	Oct 2018
Berkeley Topology Seminar	Feb 2018
Rice University Topology Seminar	Feb 2018
Rutgers Topology Seminar	Oct 2017
University of Southern California Geometry and Topology Seminar	Apr 2017
Caltech Geometry and Topology Seminar	Apr 2017
University of Glasgow Geometry and Topology Seminar	Dec 2016
University of Chicago Geometry/Topology Seminar	Nov 2016
San Francisco State University Algebra/Geometry/Combinatorics Seminar	Oct 2016
Rutgers University Topology/Geometry Seminar	Apr 2016
CUNY Hyperbolic Geometry Seminar	Feb 2016
University of Texas at Austin Topology Seminar	Oct 2015
Temple University Geometry-Topology Seminar	Apr 2015
Rutgers University Topology Seminar	Apr 2015
Cornell University Topology/Geometric Group Theory Seminar	Apr 2015
University of Toronto Geometry & Topology Seminar	Feb 2015
Purdue University Geometry Seminar	Feb 2015
Stanford University Geometry & Topology Seminar	Oct 2014
University of California, Berkeley Topology Seminar	Oct 2014
University of Illinois at Urbana-Champaign GEAR Seminar	Oct 2014
Arizona State University Differential Geometry Seminar	Sep 2014
Michigan State University Geometry Seminar	Apr 2014
Indiana University, Bloomington Teichmüller Theory Seminar	Sep 2013
CUNY Geometry and Topology Seminar	Apr 2013
Purdue University Geometry Seminar	Feb 2013
University of Michigan Topology Seminar	Jan 2013

SERVICE
ACTIVITIES

Co-organizer , AIM Workshop "Surfaces of infinite type"	Apr 2019
Organizer , UCSB Topology Seminar	2018–present
Panelist , UCSB Promise Scholar Panel "How to talk to your professors."	Aug 2018
Panelist , UCSB AWM Panel "Graduate school and beyond."	Apr 2018
Host , UCSB Faculty Nights, "An uncensored discussion about gender discrimination." <i>Interactive event bringing together students & faculty through the exploration of a hot topic.</i>	Feb 2018
Speaker , UCSB AWM Research Talk for Undergraduates	Feb 2018
Speaker , Research talk for REU at UCSB	Jul 2017
Co-organizer , UCSB AWM and Hypatian Seminar joint events	2016–2017
Panelist , Women in STEM Mentorship Program, Life in Academia Panel, UCSB	Mar 2017
Co-organizer , Topology Students Workshop, Georgia Institute of Technology <i>Professional development workshop for graduate students.</i>	Jun 2016
Teaching Assistant , Institute for Advanced Study Women and Mathematics Program	May 2016
Co-organizer , Geometry, Groups, and Dynamics Conference, Indianapolis, IN	Mar 2016
Referee Work , <i>Int. Math. Res. Not., Algebr. Geom. Topol.</i>	2015–present

	Co-organizer , Purdue University Geometry Seminar	2013–2016
	Speaker , Basic Skills Workshop- Networking, CVs, and webpages, Purdue University	Oct 2015
	Panelist , Basic Skills Workshop - Job Market Panel, Purdue University	Sep 2014
	Mentor , Topology Students Workshop, Georgia Institute of Technology <i>Professional development workshop for graduate students.</i>	Jun 2014
	Founder and organizer , Math Women’s Tea, Rutgers University	2011–2013
	Co-organizer , Rutgers University Women in Math Networking/Mentoring Dinners <i>Funded by Rutgers University NSF ADVANCE grant.</i>	2011–2013
	Grad representative , Graduate Student-Faculty Liaison Committee, Rutgers University	2010–2013
	Teaching consultant , Rutgers University	2012
	Co-organizer , Graduate Student Seminar, Rutgers University	2010–2011
EDUCATIONAL OUTREACH	Volunteer , Math outreach event at The Wolf Museum of Exploration + Innovation	May 2018
	Speaker , High school outreach, Avenues: The World School, New York, NY	Dec 2017
	Instructional assistant , NJ Partnership for Excellence in Middle School Mathematics <i>Assisted middle school teachers in daily problem solving sessions and led discussions on ways to engage students more effectively.</i>	2012 & 2013
TEACHING EXPERIENCE	University of California, Santa Barbara	
	Instructor, Math 34A Calculus for the Life and Social Sciences (275 students)	Spring 2018
	Instructor, Math 34A Calculus for the Life and Social Sciences (300 students)	Winter 2018
	Instructor, Math 113 Non-Euclidean Geometry	Fall 2017
	Instructor, Math 8 Transition to Higher Mathematics and Math 6A Multi-Variable Calculus	Spring 2017
	Instructor, Math 8 Transition to Higher Mathematics	Winter 2017
	Instructor, Math 6A Multi-Variable Calculus (100 students)	Fall 2016
	Purdue University	
	Instructor, Math 265 Linear Algebra for Engineers	Spring 2016
	Instructor, Math 351 Elementary Linear Algebra	Fall 2015
	Instructor, Math 351 Elementary Linear Algebra	Spring 2015
	Instructor, Math 351 Elementary Linear Algebra	Fall 2014
	Instructor, Math 351 Elementary Linear Algebra	Spring 2014
	Instructor, Math 265 Linear Algebra for Engineers	Fall 2013
	Rutgers University	
	Instructor, Math 103 Topics in Math for the Liberal Arts	Fall 2012
	Instructor, Math 250 Introductory Linear Algebra	Summer 2011
	Instructor, Math 135 Calculus I	Summer 2010
	Head Teaching assistant, Math 135 Calculus I	2010–2011
	Teaching assistant, Math 151 Calculus I	Fall 2009
REFERENCES	Feng Luo fluo@math.rutgers.edu	
	Alan Reid alan.reid@rice.edu	
	Ruth Charney charney@brandeis.edu	
	Darren Long long@math.ucsb.edu	
	Christopher Leininger clein@math.uiuc.edu	
	David Ben McReynolds dmcreyno@purdue.edu	
	Maria Isabel Bueno Cachadina (Teaching reference) mbueno@math.ucsb.edu	
MISCELLANEOUS	Citizenship: United States of America	