

## Jiayin Pan

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CONTACT INFORMATION	The Fields Institute 222 College Street Toronto, Ontario M5T 3J1, Canada	<a href="mailto:jpan@fields.utoronto.ca">jpan@fields.utoronto.ca</a> <a href="mailto:jypan10@gmail.com">jypan10@gmail.com</a> <a href="https://jypan10.github.io/">https://jypan10.github.io/</a>
RESEARCH INTEREST	Riemannian geometry, Ricci curvature and topology, Gromov-Hausdorff convergence.	
EMPLOYMENT	July 2021 - June 2022 <i>Fields Postdoctoral Fellowship</i> , Fields Institute for Research in Mathematical Sciences, Toronto, ON, Canada.  July 2018 - June 2021 <i>Visiting Assistant Professor</i> , University of California, Santa Barbara, CA, USA.	
EDUCATION	September 2012 - May 2018 <i>Ph.D. in Mathematics</i> , Rutgers University, New Brunswick, NJ, USA. Advisor: Xiaochun Rong  September 2008 - May 2012 <i>B.S. in Mathematics</i> , Shanghai Jiao Tong University, China.	
RESEARCH ARTICLES	<i>Nonnegative Ricci curvature, stability at infinity and finite generation of fundamental groups.</i> Geometry & Topology 23-6 (2019), 3203-3231. DOI:10.2140/gt.2019.23.3203 <i>A proof of Milnor conjecture in dimension 3.</i> Journal für die Reine und Angewandte Mathematik 758 (2020), 253-260. DOI:10.1515/crelle-2017-0057 <i>On the escape rate of geodesic loops in an open manifold with nonnegative Ricci curvature.</i> Geometry & Topology 25 (2021), 1059-1085. DOI:10.2140/gt.2021.25.1059 <i>Semi-local simple connectedness of non-collapsing Ricci limit spaces</i> (with Guofang Wei). Journal of the European Mathematical Society. DOI:10.4171/JEMS/1166 <i>Nonnegative Ricci curvature and escape rate gap.</i> Journal für die Reine und Angewandte Mathematik. DOI:10.1515/crelle-2021-0065 <i>Some topological results of Ricci limit spaces</i> (with Jikang Wang). arXiv:2103.11344, to appear in Transactions of the American Mathematical Society. <i>Examples of Ricci limit spaces with non-integer Hausdorff dimension</i> (with Guofang Wei). arXiv:2106.03967, to appear in Geometric and Functional Analysis. <i>Ricci curvature and isometric actions with scaling nonvanishing property</i> (with Xiaochun Rong). arXiv:1808.02329 <i>Nonnegative Ricci curvature, almost stability at infinity, and structure of fundamental groups.</i> arXiv:1809.10220 <i>Nonnegative Ricci curvature, metric cones, and virtual abelianness.</i> arXiv:2201.07852	
SURVEY ARTICLES	<i>The fundamental groups of open manifolds with nonnegative Ricci curvature.</i> SIGMA 16 (2020), 078, 16 pages. DOI:10.3842/SIGMA.2020.078 <i>Universal covers of Ricci limit and RCD spaces</i> (with Guofang Wei). Differential Geometry in the Large, London Mathematical Society Lecture Note Series (463), Cambridge University Press, 2020, Page 352-372.	

AWARDS	<p>Fields Postdoctoral Fellowship, 7/1/2021 to 6/30/2022</p> <p>AMS Simons Travel Grant, 7/1/2019 to 6/30/2021</p> <p>Excellence Fellowship for Dissertation Work, Rutgers University, Fall 2017</p>
ACADEMIC ACTIVITIES	<p>Referee for Proceedings of the American Mathematical Society</p> <p>Referee for Advances in Mathematics</p> <p>Referee for International Mathematics Research Notices</p> <p>Referee for Calculus of Variations and Partial Differential Equations</p> <p>Referee for Special Issue of SIGMA on Scalar and Ricci Curvature</p> <p>Co-organizer of UCSB Differential Geometry Seminar (2019-2021 academic years)</p>
SEMINAR/ CONFERENCE TALKS	<p>Geometric Analysis Seminar, CUNY Graduate Center (February 24, 2022)</p> <p>Topology/Geometry Seminar, University of Oregon (February 8, 2022)</p> <p>Differential Geometry and Symplectic Topology Seminar, University of Minnesota, Twin Cities (February 3, 2022)</p> <p>Geometric Analysis Seminar, University of Chicago (February 1, 2022)</p> <p>Differential Geometry Seminar, Nanjing University (November 5, 2021)</p> <p>Geometry/Topology Seminar, University of Science and Technology of China (November 4, 2021)</p> <p>Geometry/Topology Seminar, Rutgers University (September 14, 2021)</p> <p>Geometry/Topology Seminar, University of Toronto (September 13, 2021)</p> <p>Fields Postdoc Colloquium, The Fields Institute (September 10, 2021)</p> <p>Mini course, Sun Yat-sen University (August 18 20 22, 2021)</p> <p>Metric Geometry Seminar, Capital Normal University (June 11, 2021)</p> <p>Differential Geometry and Geometric Analysis Seminar, Princeton University (May 5, 2021)</p> <p>Virtual seminar on geometry with symmetries (April 7, 2021)</p> <p>Geometry/Topology Seminar, Rutgers University (November 3, 2020)</p> <p>Differential Geometry Seminar, University of California, Santa Barbara (October 16, 2020)</p> <p>Differential Geometry Seminar, Centro de Investigacion en Matematicas (October 12, 2020)</p> <p>2020 Virtual Workshop on Ricci and Scalar curvature (August, 2020)</p> <p>Geometry/Topology Seminar, Stony Brook University (May 26, 2020)</p> <p>Differential Geometry Seminar, University of California, Santa Barbara (February 21, 2020)</p> <p>Differential Geometry Seminar, Nanjing University (December 21, 2019)</p> <p>AMS Special Session on Topics in Global Geometric Analysis, University of California, Riverside (November 9 - 10, 2019)</p> <p>Geometry/Topology Seminar, University of Toronto (October 28, 2019)</p> <p>Differential Geometry Seminar, University of California, Berkeley (September 16, 2019)</p> <p>Geometry/Topology Seminar, Rutgers University (September 10, 2019)</p> <p>Differential Geometry Seminar, University of California, Santa Barbara (April 19, 2019)</p> <p>Differential Geometry Seminar, University of California, Irvine (February 12, 2019)</p> <p>Differential Geometry Seminar, University of California, Santa Barbara (October 26, 2018)</p> <p>Lecture series, Capital Normal University (July 27 - August 6, 2018)</p> <p>Geometry Seminar, Eastern China Normal University (July 19, 2018)</p> <p>Geometry Seminar, ZheJiang University (July 2, 2018)</p> <p>Geometry/Topology Seminar, Rutgers University (March 20, 2018)</p> <p>Geometry/Topology Seminar, Stony Brook University (February 13, 2018)</p> <p>Geometry/Topology Seminar, Rutgers University (October 17, 2017)</p> <p>Geometric Analysis Seminar, Fudan University (August 24, 2017)</p>

Young Mathematician Workshop on Differential and Metric Geometry, Capital Normal University (August 12-13, 2017)  
 Geometric Analysis Seminar, CUNY Graduate Center (May 11, 2017)  
 Geometry/Topology Seminar, Rutgers University (November 15, 2016)  
 Workshop on Geometry and Analysis on Manifolds, Eastern China Normal University (July 16-17, 2016)

TEACHING  
EXPERIENCE

*University of California, Santa Barbara*  
 Spring 2021 *Vector Calculus I*  
 Winter 2021 *Vector Calculus I*  
 Fall 2020 *Non-Euclidean Geometry*  
                   *Introduction of Differential Equations*  
 Spring 2020 *Transition to Higher Mathematics*  
                   *Vector Calculus I*  
 Winter 2020 *Introduction of Differential Equations*  
 Fall 2019 *Non-Euclidean Geometry*  
                   *Vector Calculus I*  
 Spring 2019 *Introduction of Differential Equations*  
 Winter 2019 *Vector Calculus I*  
 Fall 2018 *Transition to Higher Mathematics*  
                   *Introduction of Differential Equations*

*Rutgers University, New Brunswick (as Teaching Assistant)*  
 Spring 2018 *Introduction to Real Analysis*  
 Summer 2017 *Differential Equations for Science & Engineering (as Instructor)*  
 Spring 2017 *Calculus II*  
 Fall 2016 *Calculus II*  
 Spring 2016 *Differential Equations for Science & Engineering*  
 Fall 2015 *Introduction to Real Analysis*  
 Spring 2015 *Calculus II*  
 Fall 2014 *Calculus I*  
 Spring 2014 *Calculus I*  
 Fall 2013 *Calculus II*