

Curriculum Vitae

Guofang Wei

General Information —

Address: Department of Mathematics, UC Santa Barbara, Santa Barbara, CA 93106

email: wei@math.ucsb.edu <http://www.math.ucsb.edu/~wei>

Citizenship: United States

Research Field —Differential Geometry

Education —

- B.S., Zhejiang University, China, July 1985
- Ph.D., State University of New York, Stony Brook, August 1989
Thesis Advisor: Detlef Gromoll

Award, Fellowship and Honor —

- Eisenbud Professor, MSRI, Spring 2016
- Changjiang Scholar, East China Normal University, 2015-2018
- 2014 Class of the Fellows of the American Mathematical Society
- Member, IHES, August 1998
- Member, MSRI, March 2007, September 2013
- Alfred P. Sloan Doctoral Dissertation Fellow, 1988–89

Employment —

- Professor, UC Santa Barbara, 7/2002–
- Associate professor, UC Santa Barbara, 7/1996–6/2002
- Assistant professor, UC Santa Barbara, 7/1992– 6/1996
- Visiting assistant professor, UC Los Angeles, 7/1995–3/1996 (on leave from UCSB)
- Postdoctoral fellow, MSRI, 9/1993-12/1993 (on leave from UCSB)
- Postdoctoral fellow, MSRI, 9/1991–6/1992
- C. L. E. Moore Instructor, MIT, 7/1989–8/1991

Other Professional Contributions —

- Editor, Proc. AMS, Feb. 2014 — current
- Member, Board of Governors of Pacific Journal of Mathematics

Ph. D. Students —

- Lydia Kennedy, 2003, Associate Professor, Virginia Wesleyan
- John Ennis, 2004, Vice President - Research Operations at The Institute for Perception
- William C Wylie 2006, Associate Professor, Syracuse University
- Peng Wu 2012, Fudan University
- Kevin Brighton 2012,
- Brent Albrecht 2013, Assistant Professor, Dixie State University
- Maree Jaramillo 2014, Assistant Professor, University of Connecticut
- Zhongmin Jin, 2018
- Yousef Chahine, 2019

Postdoctoral Scholars Supervised —

- Vitali Kapovitch, 2001-2004
- Yu Ding, 2005-2006
- Yujen Shu, 2007-2010
- Bingyu Song, 2012-2013
- Lee Kennard, 2012-2015
- Shoo Seto, 2015-2018
- Jesus Nunez-Zimbron, 2016-2017
- Christopher Lopez, 2017-2020
- Jiayin Pan, 2018-2021

Publication List of Guofang Wei —

1. *Examples of complete manifolds of positive Ricci curvature with nilpotent isometry groups*, Bull. Amer. Math. Soci. Vol. 19, no. 1 (1988), 311–313.
2. *Aspects of positively Ricci curved spaces: new examples and the fundamental group*, Ph.D. thesis, SUNY at Stony Brook, 1989.
3. *On the fundamental groups of manifolds with almost-nonnegative Ricci curvature*, Proc. of AMS Vol. 110 (1990), 197–199.
4. *On Riemannian manifolds of almost nonnegative curvature* (joint with Z. Shen), Indiana Univ. Math. J. Vol. 40 (1991), 551–565.
5. *Volume growth and finite topological type* (joint with Z. Shen), Proc. Symposia in Pure Math. 54 (1993), 539-549.
6. *Negative Ricci curvature and isometry group* (joint with X. Dai and Z. Shen), Duke Math J. 76 (1994) 59-73.
7. *Finite part of the spectrum and isospectrality* (joint with X. Dai), Contemp. Math. 173 (1994) 99-107.

8. *Toponogov type comparison estimate for Ricci curvature* (joint with X. Dai), Math. Ann. 303 (1995) 297-306.
9. *Smoothing Riemannian metrics with Ricci curvature bounds* (joint with X. Dai and R. Ye), Manu. Math. 90 (1996) 46-61.
10. *Comparison geometry with integral curvature bounds* (joint with P. Petersen, S. Shteingold), GAFA (Geometric and functional analysis) 7 (1997) 1011-1030.
11. *Relative volume comparison with integral curvature bounds* (joint with P. Petersen), GAFA (Geometric and functional analysis) 7 (1997) 1031-1045.
12. *Ricci curvature and betti numbers*, J. Geom. Anal. 7 (1997) 493-509.
13. *Controlled geometry via smoothing* (joint with P. Petersen and R. Ye), Comment. Math. Helv. 74 (1999) 345-363.
14. *Integral pinching theorems* (joint with X. Dai and P. Petersen), Manu. Math. 101 (2000) 143-152.
15. *Analysis and geometry on manifolds with integral Ricci curvature bounds II* (joint with P. Petersen), Trans. Amer. Math. Soc. 353 (2001), no.2, 457-478.
16. *Hausdorff convergence and universal covers* (joint with C. Sormani), Trans. Amer. Math. Soc. 353 (2001), 3585-3602.
17. *Metrics of positive Ricci curvature on vector bundles over nilmanifolds* (joint with I. Belegradek), GAFA 12 (2002) 56-72.
18. *A heat kernel lower bound for integral Ricci curvature* (joint with X. Dai), Michigan Math. Jour. 52 (2004) 61-69.
19. *Universal covers for Hausdorff limits of noncompact spaces* (joint with C. Sormani), Trans. Amer. Math. Soc. 356 (2004), no. 3, 1233-1270.
20. *Metrics of positive Ricci curvature on bundles* (joint with I. Belegradek), International Math Research Notices 2004 n. 57 (2004) 3079-3096.
21. *The covering spectrum of a compact length space* (joint with C. Sormani), Journal of Diff. Geom. 67 (2004) 35-77.
22. *On the Stability of Riemannian Manifold with Parallel Spinors* (joint with X. Dai, X. Wang), Inven. Math. 161 (2005) 151-176.
23. *Describing the Universal Cover of a Compact Limit* (joint with J. Ennis), Differential Geometry and its Applications 24, Issue 5 (2006), 554-562 .
24. *Hitchin-Thorpe Inequality for Noncompact Einstein 4-Manifolds* (with X. Dai), Adv. in Math. 214 (2007) 551-570.
25. *Manifolds with A Lower Ricci Curvature Bound*, Surveys in Differential Geometry XI (2007) 203-228.
26. *On the Variational Stability of Kähler-Einstein Metrics* (with X. Dai, X. Wang) Comm. in Analysis and Geom., Vol. 15, no. 4 (2007) pp. 669-693.
27. *Comparison Geometry for the Smooth Metric Measure Spaces* (with W. Wylie) Proceedings of the 4th International Congress of Chinese Mathematicians, Hangzhou, China, , Vol. II (2007) pp. 191-202.

28. *A Neumann Type Maximum Principle for the Laplace Operator on Compact Riemannian Manifolds* (with R. Ye) *Journal of Geometric Analysis*, Vol 19, no. 3 (2009) pp. 719-736.
29. *Comparison Geometry for the Bakry-Emery Ricci Tensor* (joint with W. Wylie), *Journal of Diff. Geom.* Vol. 83, no. 2 (2009) pp. 377-405.
30. *The Cut-off Covering Spectrum* (with C. Sormani) *Tran. AMS*, Vol. 362, no. 5 (2010) pp. 2339-2391.
31. *Describing the universal cover of a noncompact limit* (with J. Ennis) *Geometry and Topology*, Vol. 14, no. 4 (2010) pp. 2479-2496.
32. *Rigidity of Quasi-Einstein Metrics* (with J. Case and Y.-J. Shu) *Differential Geometry and its Applications*, Vol. 29 (2011) pp. 93-100.
33. *On Volume of Hyperbolic Orbifolds* (with I. Adeboye) *Algebraic and Geometric Topology*, Vol. 12 (2012) pp. 215-233.
34. *Volume comparison and its generalizations*, *Advanced Lecture in Mathematics*, Vol. 22 (2012) pp. 311-322.
35. *On Volume Growth of Gradient Steady Ricci Solitons* (with P. Wu), *Pacific Journal of Mathematics*, 265 (2013), 233-241.
36. *On volumes of complex hyperbolic orbifolds* (with I. Adeboye), *Michigan Math. Journal* 63, Issue 2 (2014), 355-369.
37. *Various Covering Spectra for Complete Metric Spaces* (with C. Sormani), *Asian Journal of Math.* Vol. 19 (2015), 171-202.
38. *Monotonicity Formulas for Bakry-Emery Ricci Curvature* (with B. Song, G. Wu), *J. Geometric Analysis* 25 (2015), no.4, 2716-2735.
39. *On the universal cover and the fundamental group of an $RCD^*(K, N)$ -space*(with A. Mondino), *Journal für die reine und angewandte Mathematik* (2016).
40. *First eigenvalue of the p -Laplacian under integral curvature condition* (with S. Seto), *Non-linear Anal.* 163 (2017), 60 - 70.
41. *Local Sobolev Constant Estimate for Integral Ricci Curvature Bounds* (with X. Dai, Z. Zhang), *Advances in Mathematics* 325 (2018), 1-33.
42. *Neumann Isoperimetric Constant Estimate for Convex Domains* (with X. Dai, Z. Zhang), *Proc. AMS* 146 (2018), no. 8, 3509-3514.
43. *Reilly-type inequalities for p -Laplacian on submanifolds in space forms* (with H. Chen), *Non-linear Analysis* 184 (2019), 210-217.
44. *Sharp Fundamental Gap Estimate on Convex Domains of Sphere* (with S. Seto, L. Wang), to appear in *Journal of Diff. Geom.*.
45. *Fundamental Gap of Convex Domains in the Spheres (with Appendix B by Qi S. Zhang)* (with C. He), to appear in *Amer. Journal of Math.*.
46. *Local Sobolev constant estimate for integral Bakry-Emery Ricci curvature* (with L. Wang), to appear in *Pacific Journal of Math.*.
47. *Fundamental gap estimate for convex domains on sphere – the case $n=2$* (with X. Dai, S. Seto), to appear in *Comm. in Analysis and Geometry*.