

Yueh-Ju Lin

Curriculum Vitae

January 15, 2021

Department of Mathematics, Statistics and Physics
Wichita State University

Personal Contact

Department of Mathematics and Statistics
355 Jabara Hall, 1845 Fairmount St.
Wichita State University
Wichita, KS 67260-0033, USA

Tel: 316-978-3982

Fax: 316-978-3748

Email: lin@math.wichita.edu

Webpage: <http://www.math.wichita.edu/~lin/>

Research Interests

Conformal Geometry, Geometric Analysis, and Partial Differential Equations

Employment

August 2018 – present	Assistant Professor, Department of Mathematics, Statistics and Physics, Wichita State University, USA
July 2017 – June 2018	Instructor, Department of Mathematics, Princeton University, USA
January 2016 - May 2016	Postdoctoral Fellow, Mathematical Sciences Research Institute, Berkeley, USA
September 2014 – June 2017	Postdoctoral Assistant Professor, Department of Mathematics, The University of Michigan, USA
July 2007 – June 2008	Research Assistant, Institute of Mathematics, Academia Sinica, Taiwan Advisor: Professor Cheng, Jih-Hsin

Education

August 2010 – May 2014	University of Notre Dame Ph.D., Mathematics Advisor: Professor Matthew Gursky
August 2008 – May 2010	University of Notre Dame M.S., Mathematics Advisor: Professor Matthew Gursky
September 2003 – June 2007	National Taiwan University B.S., Mathematics

Publications:

1. (with W. Yuan) *Deformations of Q -curvature II* — (Preprint)
2. (with J. Case, W. Yuan) *Some constructions of formally self-adjoint conformally covariant polydifferential operators* — submitted (2020). <https://arxiv.org/abs/2002.05874>
3. (with J. Case, W. Yuan) *Conformally variational Riemannian invariants* — Trans. Amer. Math. Soc. 371 (2019), no. 11, 8217-8254
4. (with W. Yuan) *A symmetric 2-tensor canonically associated to Q -curvature and its applications* — Pacific Journal of Mathematics 291-2 (2017), 425–438.
5. (with W. Yuan) *Deformations of Q -curvature I* — Calc. Var. Partial Differential Equations 55 (2016), no. 4, Paper No. 101, 29 pp
6. (With M. Gursky, F. Hang) *Riemannian manifolds with positive Yamabe invariant and Paneitz operator* — Int. Math. Res. Not. IMRN 2016, no. 5, 1348-1367
7. *Connected sum construction of constant Q -curvature manifolds in higher dimensions*, Differential Geom. Appl. 40 (2015), 290-320.

Invited Talks

1. CUNY Geometric Analysis Seminar, Virtual, October 15, 2020
2. Special Session on Special Session on Variational Aspects of Geometric Analysis, 2020 AMS Fall Eastern Virtual Sectional Meeting, October 3-4, 2020
3. (postponed) Conformal Geometry, Analysis, and Physics, University of Washington, June 2020
4. 2020 Taipei-Hsinchu Conference On Geometric Invariance And Partial Differential Equations, Academia Sinica, Taipei and NTHU, Hsinchu, Taiwan, Jan. 4 - 9, 2020
5. Geometry and Physics Seminar, Penn State University, March 12, 2019
6. INDAM - Nonlinear PDEs in Geometry and Physics conference, Cortona, Italy, June 15, 2018
7. Princeton University Day, 2018 IAS Women and Mathematics program -Mathematics of Modern Cryptography, May 23, 2018
8. Analysis and PDE Seminar, Johns Hopkins University, April 16, 2018
9. Geometric Analysis Seminar, CUNY Graduate Center, April 12, 2018
10. Special Session on Recent Development of Nonlinear Geometric PDEs, 2018 AMS Spring Central Sectional Meeting, Ohio State University, March 18, 2018
11. 2017 Midwest Geometry Conference, Kansas State University, November 18, 2017
12. Differential Geometry and Geometric Analysis seminar, Princeton University, October 11, 2017

13. NTU Mathematics Colloquium, National Taiwan University, Taiwan, February 20, 2017
14. Geometry Seminar, The University of Michigan, September 16, 2016
15. Differential Geometry/PDE seminar, University of Washington, May 25, 2016
16. Differential Geometry Seminar, University of California Irvine, April 26, 2016
17. Geometry and Analysis Seminar, University of California Santa Cruz, March 9, 2016
18. Postdoctoral Seminar, Mathematical Sciences Research Institute, Berkeley, February 19, 2016
19. Sinica-NCTS/TPE Geometry Seminar, Institute of Mathematics, Academia Sinica, Taiwan, May 29, 2015
20. Geometry Seminar, The University of Michigan, September 26, 2014
21. PDEs in Geometry and Physics Conference-Thematic Program on Nonlinear PDEs in Geometry and Physics, Summer 2014, University of Notre Dame, June 16, 2014
22. 2nd Annual Midwest Women in Mathematics Symposium, University of Notre Dame, April 5, 2014
23. Special Session on Recent Progress in Geometric and Complex Analysis, 2014 AMS Joint Mathematics Meetings, Baltimore, January 16, 2014
24. Differential Geometry and Geometric Analysis Seminar, Princeton University, November 22, 2013
25. PDE, Complex Analysis and Differential Geometry Seminar, University of Notre Dame, November 5, 2013
26. TIMS Geometry Seminar, Taida Institute for Mathematical Sciences(TIMs), Taiwan, June 4, 2013

Grants

- Awarded:

2019: co-PI for NSF Grant DMS-1856293 for "Midwest Geometry Conference 2019-2021" (with David Auckly, Ivan Blank, Xuan Hien Nguyen, Catherine Searle, and Pablo Raul Stinga) The conference will be held annually at Iowa State University, Wichita State University, and Kansas State University.
Award amount for WSU: \$20,000.

Honors/Awards/Certificates

1. 2016-17 Cha-Chern Scholar at the Mathematical Sciences Research Institute
2. Graduate Student Travel Grants (to attend Joint Meetings), American Mathematical Society, 2013.
3. Striving for Excellence in Teaching Certificate, Kaneb Center for Teaching and Learning, University of Notre Dame, Fall 2013

Teaching Experience

Wichita State University

- Math 829T, Differentiable Manifolds Spring 21
- Math 720, Modern Geometry Spring 20
- Math 621, Elementary Geometry Fall 19, Fall 20
- Math 511, Linear Algebra Spring 19, Fall 19, Spring 20, Fall 20, Spring 21
- Math 555, Differential Equations I Fall 18, Spring 19

Princeton University

- Math 175, Multivariable Calculus for Economics & Life Sciences Fall 17, Spring 18 (Course Head)

University of Michigan

- Math 115, Calculus I Fall 14, Fall 16, Spring 17
- Math 215, Calculus III Winter 15, Fall 15, Winter 17

University of Notre Dame

- Math 10360, Calculus B for Life & Social Sciences Spring 11, Spring 12

Teaching Assistant at Notre Dame (Recitations)

- Math 20580, Intro to Linear Algebra & Differential Equations Spring 13
- Math 10360, Calculus B for Life & Social Sciences Fall 09, Spring 10, Fall 12
- Math 10560, Calculus II Fall 11
- Math 10550, Calculus I Fall 10

Online Assignments System Manager

- Math 10560, Calculus II Fall 2011

Service

- Conference Organization:
 1. The Midwest Geometry Conference, Iowa State University, September 6-8, 2019
 2. 11th Annual Graduate Student Topology & Geometry Conference, University of Notre Dame, April 6-7, 2013
- Seminar Organization:
 - Geometry/Topology seminar, Wichita State University, Fall 2018 - Present
- Refereed for Journals:
 - Calculus of Variations and Partial Differential Equations
 - International Mathematics Research Notices
 - Mathematische Zeitschrift
 - Pacific Journal of Mathematics
 - The Michigan Mathematical Journal
- Reviewer for Mathematical Reviews/MathSciNet

- Committees Works at Wichita State University
 - MS Thesis Committee - Austin Bosgraaf (Mathematics, 2020)
 - Member, Department of Mathematics and Statistics graduate enrollment management committee (2019)
 - Member, Department of Mathematics and Statistics website committee (2019 - present)

Main Conference/Programs Attended

1. 2020 Taipei-Hsinchu Conference On Geometric Invariance And Partial Differential Equations, Academia Sinica, Taipei and NTHU, Hsinchu, Taiwan, Jan. 4 - 9, 2020,
2. Midwest Geometry Conference 2019, Iowa State University, September 6-8, 2019
3. Women in Geometry 2 workshop, Casa Matemática Oaxaca (CMO), Oaxaca, Mexico, June 23-28, 2019
4. 34th Geometry Festival, University of Maryland, April 5-7, 2019
5. INDAM - Nonlinear PDEs in Geometry and Physics conference, Cortona, June 11-15, 2018
6. Special Session on Recent Development of Nonlinear Geometric PDEs, 2018 AMS Spring Central Sectional Meeting, Ohio State University, March 17-18, 2018
7. 2017 Midwest Geometry Conference, Kansas State University, November 17-19, 2017
8. Maryland Analysis and Geometry Atelier, University of Maryland, August 21-25, 2017
9. Mini-school on Nonlinear Equations, Center of Mathematical Sciences and Applications, Harvard, December 3-4, 2016
10. Differential Geometry Program - Introductory Workshop: Geometric Flows in Riemannian and Complex Geometry, MSRI, Berkeley, May 2-6, 2016
11. Differential Geometry Program - Introductory Workshop: Kähler Geometry, Einstein Metrics, and Generalizations, MSRI, Berkeley, March 21-25, 2016
12. The 23rd Southern California Geometric Analysis Seminar, University of California Irvine, January 30-31, 2016
13. Differential Geometry Program - Introductory Workshop: Modern Riemannian Geometry, MSRI, Berkeley, January 18-22, 2016
14. Differential Geometry Program - Connections for Women: Differential Geometry, MSRI, Berkeley, January 14-15, 2016
15. 76th Midwest PDE Seminar, Michigan State University, November 21-22, 2015
16. International Workshop on Conformal Geometry and Geometric PDE - Part II: Conference, Beijing International Center for Mathematical Research, Peking University, June 29 - July 3, 2015

17. International Workshop on Conformal Geometry and Geometric PDE - Part I: Mini-Course, Beijing International Center for Mathematical Research, Peking University, June 22 - 26, 2015
18. PDEs in Geometry and Physics Conference-Thematic Program on Nonlinear PDEs in Geometry and Physics, Summer 2014, University of Notre Dame, June 16-20, 2014
19. Graduate and Postdoc Summer School-Thematic Program on Nonlinear PDEs in Geometry and Physics, Summer 2014, University of Notre Dame, June 9-13, 2014
20. 73rd Midwest PDE Seminar, Northwestern University, May 10-11, 2014
21. Great Lakes Geometry 2014, University of Notre Dame, April 26-27, 2014
22. 29th Annual Geometry Festival, Stony Brook University, April 11-13, 2014
23. 2nd Annual Midwest Women in Mathematics Symposium, University of Notre Dame, April 5, 2014
24. 2014 AMS Joint Mathematics Meetings, Baltimore Convention Center, Baltimore, January 15-18, 2014
25. Summer School in Complex Geometry, Rutgers University, August 12-18, 2013
26. 23th Annual PCMI/IAS Graduate Summer School in Geometric Analysis, Park City, Utah, June 30 – July 20, 2013
27. 11th Annual Graduate Student Topology & Geometry Conference, University of Notre Dame, April 6-7, 2013
28. Conference on Metric Geometry and Applications, University of Notre Dame, March 14-17, 2013
29. Geometry and Physics Conference/Conformal and Kähler Geometry Trimester Conference, Insitut Henri Poincaré, France, October 8-12, 2012
30. Conformal and Kähler Geometry Conference/ Conformal and Kähler Geometry Trimester Conference, Insitut Henri Poincaré, France, September 17-21, 2012
31. 2012 Workshop on Geometric Partial Differential Equations, Institute of Mathematics, Academia Sinica, Taiwan, June 11-13, 2012 National Tsing-Hua University, Hsinchu, Taiwan, June 7-9,2012
32. The 5th Symposium on Analysis & PDEs, Purdue University, May20-23, 2012
33. Great Lakes Geometry Conference 2012, Ohio State University, Columbus, OH, April 14-15, 2012
34. 68th Midwest PDE Seminar, University of Notre Dame, November 4-6, 2011
35. A Conference in Honor of the 70th Birthday of S. R. S. Varadhan, National Taiwan University, Taiwan, July 11 - July 15, 2011
36. 2011 Taiwan International Conference on Geometry, National Taiwan University, Taiwan, July 04 - July 07, 2011

37. Higher Order Equations in Geometry and Physics, SISSA – International School for Advanced Studies, Trieste, Italy, May 30 - June 2, 2011
38. 2011 Joint Mathematics Meetings, New Orleans Marriott and Sheraton New Orleans, January 6-9, 2011
39. AMS Sectional Meeting - Fall 2010, University of Notre Dame, November 5-7, 2010
40. Interactions Between Geometry and Analysis, University of Notre Dame, October 21-24, 2010
41. PRIMA Conference on Geometric Analysis, University of British Columbia, Canada, July 20-30, 2010
42. NCTS/TPE-TIMS Mini-Course and Workshop on Geometric and Complex Analysis, National Taiwan University, Taiwan, June 21-July 2, 2010
43. Eighth Annual Graduate Student Topology and Geometry Conference, University of Michigan in Ann Arbor, April 10-11, 2010
44. 2009 Workshop on Complex Geometry, Academia Sinica, Taiwan, August 3-4, 2009
45. 2009 Program for Women and Mathematics (Geometric PDE), Institute of Advanced Study, June 8-19, 2009
46. The 4th Symposium on Analysis & PDEs, On the occasion of the 55th birthday of Nicola Garofalo, Purdue University, May 26-29, 2009.
47. Seventh Annual Graduate Student Topology and Geometry Conference, University of Wisconsin in Madison, April 18-19, 2009