

Xavier Ramos Olivé

Curriculum Vitae

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EDUCATION

- 2019 Ph.D. in Mathematics, University of California, Riverside (expected June 2019).
2014 B.Sc. in Physics, University of Barcelona.
2013 B.Sc. in Mathematics, Polytechnic University of Catalonia.

PUBLICATIONS

Refereed Journal Articles

- 2018 Xavier Ramos Olivé. *Neumann Li-Yau gradient estimate under integral Ricci curvature bounds*, Proceedings of the American Mathematical Society, **147**, No. 1, January 2019, Pages 411–426.

Preprints

- 2018 Xavier Ramos Olivé, Shoo Seto, Guofang Wei, Qi S. Zhang. *Zhong-Yang type eigenvalue estimate with integral curvature condition*, submitted to Mathematische Zeitschrift.

GRANTS AND FELLOWSHIPS

- 2012 *JAE intro cp Fellowship*, Spanish National Research Council (CSIC), Institute of Mathematical Sciences (ICMAT).

INVITED TALKS

- 2018 *Global properties of manifolds with integral curvature conditions*, Differential Geometry Seminar, Polytechnic University of Catalonia, December 17.
2018 *Li-Yau gradient estimate under integral Ricci curvature bounds*, Differential Geometry Seminar, University of California, Santa Barbara, June 8.

CONFERENCE PARTICIPATION

Conferences, Panels and Seminars Organized

- 2019 *MathConnections 2019 - Geometry, Representation Theory, and Category Theory*, University of California, Riverside, May 18.

- 2019 *AMS Contributed Paper Session on Geometry* (chair), Joint Mathematics Meetings, January 19.
- 2018 *MathConnections 2018 – Geometry and PDEs*, University of California, Riverside, May 19.
- 2017 *MathConnections 2017 – Algebra, Analysis, and Number Theory*, University of California, Riverside, May 27.
- 2016-2017 *Graduate Student Seminar*, University of California, Riverside, weekly meeting.

Papers presented

- 2019 *Zhong-Yang type eigenvalue estimate with integral curvature condition*, AMS Spring Central and Western Joint Sectional Meeting, March 23.
- 2019 *Zhong-Yang eigenvalue lower bound for the Laplacian on closed manifolds with integral Ricci curvature bounds*, Joint Mathematics Meetings, January 19.
- 2018 *Gradient estimates and Integral Ricci curvature*, MathConnections 2018 – Geometry and PDEs, University of California, Riverside, May 19.
- 2018 *Neumann Li-Yau gradient estimate under integral Ricci curvature bounds*, Joint Mathematics Meetings, January 10-13.

Poster Sessions

- 2018 *Gradient estimates under integral Ricci curvature*, Riverside Mathematics Workshop for Excellence and Diversity, October 19-20.

Other talks

- 2018 *Enhancing graduate student success through the organization of a conference*, MAA Fall Southern California and Nevada Sectional Meeting, October 27.

Conferences and Workshops Attended

- 2019 *26th Southern California Geometric Analysis Seminar*, University of California, San Diego, January 26-27.
- 2018 *Oberwolfach Seminar: Spectral Estimates on Noncompact Manifolds and Applications to Geometry*, Mathematisches Forschungsinstitut Oberwolfach, May 20-26.
- 2018 *25th Southern California Geometric Analysis Seminar*, University of California, Irvine, January 27-28.
- 2017 *AMS Fall Western Sectional Meeting*, University of California, Riverside, November 4-5.
- 2017 *Geometry and Analysis on Manifolds 2017*, University of California, Santa Barbara, April 7-9.
- 2017 *24th Southern California Geometric Analysis Seminar*, University of California, San Diego, February 11-12.
- 2016 *Geometric analysis on Riemannian and singular metric measure spaces*, Lake Como School of Advanced Studies, July 11-15.

- 2016 *Graduate Student Topology and Geometry Conference*, University of Indiana at Bloomington, April 1-3.
- 2016 *23rd Southern California Geometric Analysis Seminar*, University of California, Irvine, January 30-31.
- 2015 *Oberwolfach Seminar: Singularity Analysis for Geometric Flows*, Mathematisches Forschungsinstitut Oberwolfach, September 6-12.
- 2014 *10th AIMS Conference on Dynamical Systems, Differential Equations and Applications*, Autonomous University of Madrid, July 7-11.
- 2014 *8th International Summer School on Geometry, Mechanics and Control*, Institute of Mathematical Sciences (ICMAT), July.
- 2013 *8th International Young Researchers Workshop on Geometry, Mechanics and Control*, Polytechnic University of Catalonia, December.
- 2013 *7th Summer School on Geometry, Mechanics and Control*, Institute of Mathematical Sciences (ICMAT), July.
- 2012 *7th International Young Researchers Workshop on Geometry, Mechanics and Control*, Institute of Mathematical Sciences (ICMAT), December.
- 2012 *5th JAE School of Mathematics*, Institute of Mathematical Sciences (ICMAT), July.

DEPARTMENTAL TALKS

- 2019 *The fundamental tone of a Riemannian manifold*, Graduate Student Seminar, University of California, Riverside, February 15.
- 2019 *Gray code and paths on hypercubes*, UCR undergraduate Math Club, January 25.
- 2018 *Zhong-Yang eigenvalue estimate under integral curvature conditions*, Differential Geometry Seminar, University of California, Riverside, December 7.
- 2018 *Lagrangian and Hamiltonian mechanics*, Seminar of Mathematical Physics and Dynamical Systems, University of California, Riverside, April 5.
- 2018 *Li-Yau gradient estimate under integral Ricci curvature bounds*, Differential Geometry Seminar, University of California, Riverside, February 16.
- 2016 *An introduction to Geometric Mechanics*, Graduate Student Seminar, University of California, Riverside, October 21.
- 2016 *Cheeger-Colding-Naber Theory*, Graduate Student Seminar, University of California, Riverside, May 27.
- 2016 *Discovering a theorem by Erdős*, UCR undergraduate Math Club, February 4.
- 2016 *The geometry of Relativity*, Graduate Student Seminar, University of California, Riverside, January 15.

TEACHING EXPERIENCE

Associate Instructor experience

- Introduction to College Mathematics for the Sciences (Spring 2019)
- Calculus of Several Variables (Summer 2018)
- PDE Qualifying Exam Preparation Seminar (Summer 2018)

Teaching Assistant experience

Precalculus (Fall 2018, Fall 2014)
Introduction to College Mathematics for the Sciences (Fall 2015)
Introduction to College Mathematics for Business and Social Sciences (Winter 2015)
First Year Calculus (Winter 2017, Winter 2016, Spring 2015, Winter 2015)
Calculus for Life Sciences (Winter 2019, Spring 2018)
Calculus for Business (Fall 2015)
Calculus of Several Variables (Spring 2018, Spring 2017, Fall 2016)
Introduction to Discrete Mathematics (Spring 2016, Spring 2015)
Introduction to Ordinary Differential Equations (Fall 2017, Spring 2016)
Intermediate Analysis (Winter 2019)
Introduction to Differential Geometry (Winter 2018, Spring 2017, Winter 2015)
Ordinary and Partial Differential Equations (Spring 2018, Fall 2017, Winter 2017, Fall 2016)
Introduction to Mathematical Modeling (Winter 2016)

Other teaching experience

Undergraduate Research Project: *Counting with symmetries* (Spring 2017)
Microtutorials in Mathematics (Winter 2019, Spring 2018, Winter 2018)
Math Emporium (Winter 2018)

SERVICE TO PROFESSION

Reviewer of zbMATH, 2018-present.
President of the AMS Student Chapter at UCR, 2016-2017.

DEPARTMENTAL SERVICE

President of the Mathematics Graduate Student Association at UCR, 2017-2019.
Student Representative on Faculty Candidate Panel, 2019.

COMMUNITY INVOLVEMENT AND OUTREACH

2018 Judge at the *MAA Undergraduate Student Poster Session*, Joint Mathematics Meetings, January 10-13.
2017 Proctor in the *American Mathematics Competition (AMC-8)*, University of California, Riverside, November 15.
2017 *Telling apart melons from watermelons*, Gradslam 2017, University of California, Riverside, April 18.
2012 Museum Guide at the exhibition *Imaginary Barcelona*, Royal Spanish Mathematical Society and Catalan Mathematical Society, March-May.

PROFESSIONAL MEMBERSHIPS

American Mathematical Society

Mathematical Association of America
Association for Women in Mathematics

LANGUAGES

Catalan, native

Spanish, native

English, excellent

French, good

German, beginner

Mandarin Chinese, beginner