

Jesús R. Oliver

Born: Venezuela, Nationality: US Citizen

Current position

Associate Professor, California State University, East Bay

Areas of specialization

Partial Differential Equations; General Relativity; Math Education

Appointments held

2022-	<i>Associate Professor</i> , California State University, East Bay
2016-2022	<i>Assistant Professor</i> , California State University, East Bay
2015	<i>Postdoctoral Fellow</i> , Institut Henri Poincaré, Paris, France
2013-2016	<i>Lecturer</i> , University of California, San Diego

Education

2008-2013	PhD in Pure Mathematics, University of California, San Diego Thesis title: “ A Vector Field Method for Non-Trapping Spacetimes ” Advisor: Jacob Sterbenz
2003-2006	MS and BS in Pure Mathematics, University of California, Los Angeles

Grants, fellowships & awards

2023	AMS-Simons Research Enhancement Grant for Primarily Undergraduate Institution Faculty
2022	Haimo Award for Distinguished Teacher of University Mathematics, MAA Golden Section
2018-2021	SEMINAL Phase 2 Grant, National Science Foundation
2017-2018	Course Redesign with Technology Grant, CSU Chancellor’s Office
2016-2017	Research in Pairs, Institut Henri Poincaré, Paris, France
2016	Postdoctoral Fellowship, IHP-ANR, Paris, France
2008-2010	Eugene Cota-Robles Fellowship, University of California, San Diego
2003-2006	Regents Scholarship, University of California, Los Angeles

Publications

WAVE EQUATIONS RESEARCH

2023	J. Costa, A. Franzen & J. Oliver. “Semilinear Wave Equations on Accelerated Expanding FLRW Spacetimes.” <i>Annales Henri Poincaré</i> . https://doi.org/10.1007/s00023-023-01319-9
2022	P. LeFloch, J. Oliver & Yoshio Tsutsumi. “Boundedness of the Conformal Hyperboloidal Energy for a Wave-Klein-Gordon Model.” Submitted. Preprint: https://arxiv.org/pdf/2212.

[12590.pdf](#)

- 2020 J. Oliver, J. Sterbenz. "A Vector Field Method for Radiating Black Hole Spacetimes." *Analysis and PDE*. Vol. 13 no. 1, 29-92. Preprint: <https://arxiv.org/pdf/1705.10714.pdf>
- 2016 J. Oliver. "A Vector Field Method for Non-Trapping, Radiating Spacetimes." *Journal of Hyperbolic Differential Equations*. 13 no. 4, 735-790. Preprint: <http://arxiv.org/pdf/1410.5154.pdf>

MATH EDUCATION RESEARCH

- 2023 J. Oliver, J. Olkin, & S. Sisneros-Thiry. "Leveraging a Community of Practice Model to Accelerate Change." Submitted
- 2022 A. Stanculescu, F. Castronovo & J. Oliver "Assessing the Impact of Visualization Media on Engagement in an Active Learning Environment." *International Journal of Mathematical Education in Science and Technology*. DOI: [10.1080/0020739X.2022.2044530](https://doi.org/10.1080/0020739X.2022.2044530)
- 2021 J. Oliver, J. Olkin. "A Community of Practice Model for Infusing Active Learning in the Classroom." *PRIMUS*, 31, No 3-5, pp. 252-268
- 2021 J. Oliver, J. Olkin, A. Stanculescu. "A Multi-pronged Approach to Closing Opportunity Gaps in Calculus I." To appear: MAA Notes Volume on Diversity Equity and Inclusion Issues in Calculus Programs

Invited research talks

WAVE EQUATIONS RESEARCH TALKS

- 2019 AMS Sectional Meeting, Special Session on "Wave Phenomena in Fluids and Relativity," University of Wisconsin-Madison
- 2019 Mathematics Colloquium, Santa Clara University
- 2018 General Relativity Seminar, Centre for Mathematical Analysis, Geometry, and Dynamical Systems, Lisboa, Portugal
- 2017 Math/Stats Colloquium, San Jose State University
- 2016 Workshop on Global Nonlinear Stability of Einstein Spacetimes, Oberwolfach, Germany
- 2015 Mathematical General Relativity Seminar, Institut Henri Poincaré, Paris, France
- 2015 General Relativity and Gravitation: A Centennial Perspective, Penn State University
- 2015 Analysis Seminar, Georgia Southern University
- 2015 Analysis Seminar, University of Maryland, College Park
- 2015 Analysis Seminar, University of California, Los Angeles
- 2014 AMS Fall Western Sectional Meetings, San Francisco
- 2015 Analysis and PDE Seminar, University of California, Berkeley
- 2014 Differential Equations Seminar, University of Michigan, Ann Arbor
- 2014 Analysis Seminar, University of California, Los Angeles
- 2014 Analysis Seminar, University of California, San Diego
- 2014 AMS Session on PDE, AMS-MAA Joint Math Meetings, Baltimore

MATH EDUCATION RESEARCH TALKS

- 2023 Joint Math Meetings, Special Session on "Lessons Learned from Successful Departmental Efforts to Transform Precalculus and Calculus." Boston
- 2022 Change DIAL Conference. Parallel session on: "Community at the Center: The CSUEB Model

and How it Can Help."

- 2022 Critical Issues in Mathematics Education. Parallel session on: "Community at the Center: How Communities of Practice Can Help." Joint with J. Olkin. Mathematical Sciences Research Institute, Berkeley, California
- 2020 SEMINAL Data Workshop: "How to Disaggregate Student Data." Virtual session 2a. Joint with A. Stanciulescu
- 2020 JMM/AMS Joint Mathematics Meetings, MAA Contributed Paper Session on Active Learning in Introductory Courses, Denver, Colorado
- 2019 Progress Through Calculus/SEMINAL Joint Meeting, Lincoln, Nebraska