

Carlos Ospina

CONTACT INFORMATION	Department of Mathematics University of Utah Salt Lake City, UT 84112	✉ math.utah.edu/~ospina ✉ ospina@math.utah.edu
CURRENT POSITION	Graduate Teaching Assistant University of Utah, Salt Lake City, USA	Aug 2018 - May 2025
RESEARCH INTERESTS	My research interests are dynamical systems and ergodic theory —particularly studying dynamics on translation surfaces and their strata, interval exchange transformations and entropy.	
EDUCATION	University of Utah , Salt Lake City, USA Ph.D. in Mathematics (Advisor: Jon Chaika)	Aug 2018 - May 2025
	International Centre for Theoretical Physics ICTP , Trieste, Italy Postgraduate Diploma in Mathematics (Advisor: Emmanuel Carneiro)	Sep 2017 - Aug 2018
	Universidad Nacional de Colombia , Manizales, Colombia M.Sc. in Applied Mathematics (Advisor: Juan Carlos Riaño)	Jan 2015 - Jan 2017
	Universidad Nacional de Colombia , Manizales, Colombia B.Sc. in Mathematics	Jan 2010- Dec 2014
PUBLICATIONS & PREPRINTS	<p>4. Coboundaries of 3-IETs (with P. Berk) <i>Submitted</i>. Available at: arXiv:2501.06380 [math.DS] (2025)</p> <p>3. Some real Rel trajectories in $\mathcal{H}(1, 1)$ that are not recurrent <i>Submitted</i>. Available at: arXiv:2406.07495 [math.DS] (2024)</p> <p>2. Slow entropy and variational dynamical systems <i>Mathematics Research Reports</i>, 6 (2025), pp. 17-49 (with M. Cheng, K. Vinhage, and Y. Zhai)</p> <p>1. Thurston’s Theorem: Entropy in Dimension One <i>Math. Res. Lett.</i> 31 (2024), no. 1, pp. 127-174 (with R. Dickmann, G. Domat, T. Hill, S. Kwak, P. Patel, and R. Rechkin)</p>	
MENTORING & SERVICE	<p>Pares Ordenados. Virtual reading program in mathematics dedicated to Spanish-speaking students. Mentor and co-organizer. ninyam.github.io/paresordenados Jan 2023 - Jun 2024</p> <p>Ergodic Theory and Dynamical Systems Seminar. Co-organizer Aug 2024 - Jan 2025</p> <p>AWM mentoring network. Mentor Aug 2023 - Jun 2024</p> <p>Geometry, Topology and Dynamics Grad Student Seminar. Co-organizer Aug 2022 - Jun 2023</p>	
TEACHING	UNIVERSITY OF UTAH:	
	Business Algebra , Instructor	Fall 2024
	Business Algebra (Online), Instructor	Summer 2024
	Business Algebra , Instructor	Fall 2023
	Pre-REU: Approximately Rational Numbers and Continued Fractions , TA	Summer 2023
	Trigonometry , Instructor	Fall 2022
	Calculus I , Instructor	Fall 2021
	Pre-REU: Hidden Structure and Computation , TA	Summer 2021

	Business Algebra (Online), Instructor	Fall 2020
	Calculus II (Online), Instructor	Summer 2020
	Engineering Calculus II , TA	Spring 2020
	Engineering Calculus I , TA	Fall 2019
TALKS	Some real Rel trajectories in $\mathcal{H}(1, 1)$ are not recurrent University of Zurich	Jun 2024
	Some real Rel trajectories in $\mathcal{H}(1, 1)$ are not recurrent <i>Group Actions Seminar</i> , University of California, San Diego	May 2024
	Some real Rel trajectories in $\mathcal{H}(1, 1)$ are not recurrent <i>Max Dehn Seminar</i> , University of Utah	Apr 2024
	Some real Rel trajectories in $\mathcal{H}(1, 1)$ are not recurrent <i>School on Flat Surfaces and Interactions</i> , Le Teich, France	Mar 2024
	Slow Entropy of Sturmian Shifts and 3-IETs <i>Utah Dynamics Mini-Workshop</i> , University of Utah	Dec 2023
	Real Rel Flow <i>Wasatch Topology Conference</i> , University of Utah	Oct 2023
	Regularity of the Cohomological Equation for Circle Rotations <i>Online Working Seminar</i> , University of Utah	Apr 2023
	Interval Exchange Transformations & Translation Surfaces <i>Geometry, Topology and Dynamics Grad Student Seminar</i> , University of Utah	Feb 2023
	The Three Gap Theorem <i>Geometry, Topology and Dynamics Grad Student Seminar</i> , University of Utah	Oct 2022
	Maximal Functions <i>Analysis Seminar</i> , University of Utah	Oct 2022
Summer Schools, Conferences & Research Communities	Recent Trends in Homogeneous and Teichmüller Dynamics Brin Institute of Mathematics	Sep 2024
	NU Trends in Ergodic Theory Northwestern University	Jul 2024
	New Frontiers in Parabolic Dynamics and Renormalization University of Bologna	Jun 2024
	School on Flat Surfaces and Interactions Le Teich	Mar 2024
	Wasatch Topology Conference University of Utah	Oct 2023
	Dynamics Summer School Northwestern University	Jun 2023
	Big Ideas in Dynamics. An Online Research Community AIM	Spring 2023
	Combinatorics, Dynamics and Geometry on Moduli Spaces CIRM	Sep 2022
	Wasatch Topology Conference University of Utah	Aug 2022
	Houston Workshop in Hyperbolic Dynamics University of Houston	Jun 2022
	Ergodic Theory and its Connections: A Conference in Honor of the Legacy of Michael Boshernitzan	Jun 2022

