

## ACADEMIC POSITIONS

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<b>University of Notre Dame du Lac</b> <i>Society of Science Postdoctoral Fellow.</i>	<b>Indiana, USA</b> 2025 - 2028
<b>Instituto de Ciencias Matemáticas</b> <i>Predoctoral Researcher for the Spanish National Research Council.</i> <i>Ph.D. in Geometry and Algebra.</i> <ul style="list-style-type: none"><li>• Advisor: Prof. Javier Aramayona</li><li>• Research area: Mapping class groups &amp; Teichmüller theory</li></ul>	<b>Madrid, Spain</b> 2021 - 2025

## EDUCATION

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<b>Universidad Autónoma de Madrid</b> <i>Master in Mathematics and Applications</i> <ul style="list-style-type: none"><li>• Master thesis: Modular groups and arc complexes (<b>10/10</b>)</li><li>• GPA: 9.64/10</li></ul>	<b>Madrid, Spain</b> 2020 - 2021
<b>Universidad Autónoma de Madrid</b> <i>Double degree in Mathematics and Computer Science</i> <ul style="list-style-type: none"><li>• Final year project for Mathematics: Classification of surfaces (<b>10/10</b>)</li><li>• Awarded 29 <i>Matrículas de Honor</i> (Highest distinction).</li><li>• GPA: 9.30/10</li></ul>	<b>Madrid, Spain</b> 2015 - 2020

## PUBLICATIONS

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1. Homomorphisms between pure mapping class groups.  
*Advances in Mathematics* (2025).
2. Non-planar ends are continuously unforgettable.  
Joint with J. Aramayona, R. Skipper, J. Tao, N. G. Vlamis and X. Wu.  
*International Mathematics Research Notices* (2025).
3. Braided multitwists.  
*Algebraic and Geometric Topology* (2025).
4. Finite rigid sets of the non-separating curve complex.  
*Forum Mathematicum* (2022).
5. Matching arc complexes: Connectedness and hyperbolicity.  
Joint with J. Aramayona and A. Fernández.  
*Expositiones Mathematicae* (2021).
6. Towards the Automatic and Schedule-Aware Alerting of Internetwork Time Series.  
Joint with D. Perdices, J. García-Dorado, J. Ramos, J. Aracil.  
*IEEE Access* (2021).

## PREPRINTS

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1. Holomorphic maps between moduli spaces II.  
Joint with J. Souto.  
In arXiv:2412.01257 (2024).

## RESEARCH STAYS

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<b>Institut de Recherche Mathématique de Rennes</b> <i>Collaboration with prof. Juan Souto</i>	<b>Rennes, France</b> <i>April - June 2024</i>
<b>Institut Henri Poincaré</b> <i>Scientific Program:</i> <i>Groups acting on Fractals, Hyperbolicity and Self-Similarity</i>	<b>Paris, France</b> <i>April - June 2022</i>

## AWARDS, FELLOWSHIPS, & GRANTS

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<b>Provost Society of Science Fellowship</b> <i>University of Notre Dame du Lac.</i>	<b>2025 - 2028</b>
<b>FPI predoctoral contract</b> <i>Spanish Ministry of Science and Innovation.</i>	<b>2021 - 2025</b>
<b>JAE Intro SOMdM Grant</b> <i>Research grant awarded by Spanish National Research Council.</i>	<b>2020 - 2021</b>
<b>Excellence scholarships.</b> <i>Awarded yearly by the Community of Madrid.</i>	<b>2015 - 2020</b>

## INVITED TALKS, SEMINARS & COLLOQUIA

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<b>University of Notre Dame</b> <i>Rigidity results for the mapping class group.</i>	<b>September 23, 2025</b>
<b>Instituto de Ciencias Matemáticas</b> <i>Resultados de rigidez del grupo modular.</i>	<b>May 22, 2025</b>
<b>Universidad Nacional Autónoma de México</b> <i>Braided elements &amp; homomorphisms in the mapping class group.</i>	<b>October 28, 2024</b>
<b>Universidad Complutense de Madrid</b> <i>Homomorphisms between mapping class groups.</i>	<b>September 23, 2024</b>
<b>Internationales Wissenschaftsforum Heidelberg</b> <i>Transverse measures to infinite type laminations.</i>	<b>July 8, 2024</b>
<b>Institut de Recherche Mathématique de Rennes</b> <i>Holomorphic rigidity of moduli space.</i>	<b>June 24, 2024</b>
<b>Institut de Recherche Mathématique de Rennes</b> <i>Mapping class groups, braided elements and homomorphisms.</i>	<b>June 19, 2024</b>

<b>Instituto de Ciencias Matemáticas</b> <i>Braided multitwists in the mapping class group.</i>	<b>December 5, 2023</b>
<b>Universidad de León</b> <i>Finite rigidity of non-separating curve complexes.</i>	<b>February 9, 2023</b>
<b>Universidad Autónoma de Madrid</b> <i>Introduction to geometric group theory.</i>	<b>December 14, 2022</b>
<b>Instituto de Ciencias Matemáticas</b> <i>The symplectic representation of the mapping class group.</i>	<b>December 2, 2022</b>
<b>Institut Henri Poincaré</b> <i>Finite rigid sets of the non-separating curve complex.</i>	<b>June 2022</b>
<b>Instituto de Ciencias Matemáticas</b> <i>The curve complex.</i>	<b>May 24, 2022</b>
<b>Instituto de Ciencias Matemáticas</b> <i>On the hyperbolicity of arc complexes and some of their relatives.</i>	<b>December 9, 2021</b>

## TEACHING EXPERIENCE

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<b>Instructor for Calculus B</b> <i>University of Notre Dame du Lac.</i>	<b>Spring Term 25/26</b>
<b>Teaching Assistant for Mathematical Analysis</b> <i>Mathematics, Universidad Autónoma de Madrid.</i>	<b>1st Term 24/25</b>
<b>Teaching Assistant for Linear Algebra</b> <i>Data Science and Engineering, Universidad Autónoma de Madrid.</i>	<b>1st Term 23/24</b>
<b>Teaching Assistant for Mathematics</b> <i>Environmental Science, Universidad Autónoma de Madrid.</i>	<b>1st Term 22/23</b>
<b>Teacher in the ‘Pequeño instituto matemático’ (PIM)</b> <i>PIM is a weekly activity organized by the ICMAT where high-school students discuss math Olympiad style problems.</i>	<b>2022 - 2024</b>

## CONFERENCE ORGANIZATION

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<b>Geometric Group Theory and Low-dimensional Topology</b> <i>Co-organizar of Graduate School at Instituto de Ciencias Matemáticas.</i>	<b>May 2022</b>
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## WORKSHOP & CONFERENCE PARTICIPATION

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<b>A conference on Geometry, Topology and Dynamics of Infinite-type surfaces</b> <i>Casa Matemática Oaxaca.</i>	<b>June 2025</b> <i>Oaxaca, Mexico</i>
<b>Young Geometric Group Theory XIII</b> <i>University of Copenhagen.</i>	<b>April 2025</b> <i>Copenhagen, Denmark</i>

<b>Group, Topology and Applications VI</b> <i>University of the Basque Country.</i>	<b>April 2025</b> <i>Bilbao, Spain</i>
<b>Red temática de geometría y física</b> <i>Instituto de Ciencias Matemáticas.</i>	<b>November 2024</b> <i>Madrid, Spain</i>
<b>Groups in Madrid</b> <i>Instituto de Ciencias Matemáticas.</i>	<b>October 2024</b> <i>Madrid, Spain</i>
<b>Geometry and dynamics of surfaces beyond finite type</b> <i>Heidelberg University.</i>	<b>July 2024</b> <i>Heidelberg, Germany</i>
<b>Young Geometric Group Theory XII</b> <i>University of Bristol.</i>	<b>April 2024</b> <i>Bristol, UK</i>
<b>Groups in Madrid</b> <i>Instituto de Ciencias Matemáticas.</i>	<b>October 2023</b> <i>Madrid, Spain</i>
<b>Group Actions and Low-dimensional Topology</b> <i>Organized by Instituto de Ciencias Matemáticas.</i>	<b>July 2023</b> <i>Barco de Ávila, Spain</i>
<b>Groups and Dynamics in Geometry</b> <i>Organized by ETH Zürich.</i>	<b>June 2023</b> <i>Ascona, Switzerland</i>
<b>Young Geometric Group Theory XI</b> <i>University of Münster.</i>	<b>February 2023</b> <i>Münster, Germany</i>
<b>Young researchers congress of the Real Sociedad Matemática Española</b> <i>Universidad de León.</i>	<b>February 2023</b> <i>León, Spain</i>
<b>Groups, Topology and Applications IV</b> <i>University of the Basque Country.</i>	<b>February 2023</b> <i>Bilbao, Spain</i>
<b>Groups in Madrid</b> <i>Instituto de Ciencias Matemáticas.</i>	<b>October 2022</b> <i>Madrid, Spain</i>
<b>Groups acting on Fractals</b> <i>Centre International de Rencontres Mathématiques.</i>	<b>April 2022</b> <i>Luminy, France</i>
<b>Biannual meeting of the Real Sociedad Matemática Española</b> <i>University of Castilla-La Mancha</i>	<b>January 2022</b> <i>Ciudad Real, Spain</i>
<b>Groups in Madrid</b> <i>Instituto de Ciencias Matemáticas.</i>	<b>November 2021</b> <i>Madrid, Spain</i>