

Julio Sampietro Christ

Education:

- **Université Paris-Saclay (current)**
 - PhD: Floer homology and symplectic reduction
 - Advisor: Claude Viterbo
- **Université Paris-Saclay**
 - 2021-2022
 - M2 'Analyse Airthmétique et Géométrie'
 - Second year of Masters Program in Pure Mathematics
- **Universidad Nacional Autónoma de México, Mexico**
 - Years: 2016-2020
 - Bachelor's Degree in Mathematics
 - Best Academic Performance in Graduating Class: 10.00/10.00 Average
 - Selected Courses:
 - Ordinary Differential Equations I-III, Mathematical Analysis I-II, Algebra Seminar: "Topics on Ring Theory", Topology I-II
- **University of California at Berkeley, United States**
 - Fall 2019
 - Study Abroad semester
 - Selected courses:
 - Graduate Algebraic Topology, Graduate Algebraic Geometry, Graduate Riemannian Geometry
- **Lycée Franco-Méxicain, Mexico**
 - Baccalaureate

Teaching:

- **Université Paris-Saclay**
 - Teaching Assistant
 - Integral Calculus, Spring 2023
 - Linear Algebra, Spring 2023
- **Universidad Nacional Autónoma de México, Mexico**
 - Teaching Assistant
 - Ordinary Differential Equations I, Spring 2020
 - Graph Theory, Spring 2020
 - Linear Algebra I, Summer 2020
 - Contribution to course notes [here](#)
 - Co-writer for undergraduate 'Graph Homology' project
 - Integral and Differential Calculus III, Fall 2020
 - Analytic Geometry II, Fall 2020
 - Integral and Differential Calculus IV, Spring 2021
 - Linear Algebra II, Spring 2021
- **CCH Sur, México**
 - Voluntary course given to high school students wishing to pursue a Bachelor's at UNAM's Faculty of Sciences
 - 2 month long course, Summer 2018 and Summer 2020
 - Introduction to formal and abstract mathematics

Projects and research:

- **Master's Thesis**
 - "Floer Homology and Symplectic Reduction"
 - Supervisor: Claude Viterbo
- **Undergraduate Thesis**
 - "Conley Index"
 - Supervisor: Dr. Ernesto Rosales González
 - Link to the document [here](#)
 - Honorary distinction from the jury
- **VI Escuela de Invierno de Oaxaca, México, UNAM**
 - January-February 2021
 - Workshop on Characteristic Classes and Exotic Spheres
 - Research into geometric approaches to Exotic Spheres
 - Supervisor: Dr. Carlos Segovia
- **Research Interests**
 - Symplectic Topology, Algebraic Topology, Geometric Topology, Algebraic Geometry, Ordinary Differential Equations, Differential Geometry

Articles:

- Expository:
 - ['The exotic world of Milnor's spheres'](#)
 - Joint with Carlos Segovia
 - Expository article on exotic spheres.
 - Sent to *Revista Colombiana de Matemáticas* for publication.

Talks:

- **Workshop on Pseudoholomorphic curves in Hamiltonian Dynamics**
 - Title: "Maslov and Conley-Zehnder indices"
 - Talk covering the basics of Maslov and Conley-Zehnder indices in an SFT context.
 - Link to the event page [here](#)
 - February 2023
- **VI Escuela de Invierno de Oaxaca, México, UNAM**
 - Title: "Exotic Spheres: The Hirzebruch Signature Theorem"
 - Exposition on Milnor's construction on exotic spheres with emphasis on multiplicative sequences and the signature theorem.
 - February 2021
- **Petri nets reading seminar**
 - Title: "Reachability in Petri nets"
 - On Baez and Master's approach to Reachability in their article 'Open Petri nets'
 - Link to seminar's page [here](#)
 - June 2021
- **Mathematical Congress of the Americas (MCA)**
 - Poster presentation: "Homotopy theory of digraphs: A Categorical viewpoint"
 - Link to poster abstract [here](#)
 - Link to talk video [here](#)
 - July 2021

Certificates, scholarships, awards and others:

- **Honorary distinction from the jury (undergraduate thesis)**
- **Santander Study Abroad Scholarship, Fall 2019**
- **Scholarship holder, Instituto de Matemáticas, UNAM, Spring 2019, Fall 2020, Spring 2021**
- **French Baccalauréat**

Languages:

- Spanish (native)
- French
 - Fluent, Baccalaureate
- English
 - Excellent, IELTS: 8.5/9, C2 level
- Portuguese
 - Intermediate

Contact information:

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