Jennifer N. Jones-Baro

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Citizenship: United States and Mexico (dual)

Education	**Northwestern University** Ph.D. student under the advisorship of Bryna Kra (Expected Spring 2025) M.S. in Mathematics (2020). **Universidad de Guanajuato/** **Centro de Investigación en Matemáticas (CIMAT)** B.S. in Mathematics (2019).
Publications	B. Espinoza, J. N. Jones-Baro *Eigenvalues and the stabilized automorphism group* (In preparation) J. N. Jones-Baro, *The stabilized automorphism group of odometers and of Toeplitz subshifts* (Preprint) Link: arXiv:2211.07760. H. Drillick, A. Espinosa-Dominguez, Jones-Baro J. N., J. Leng, Y. Mandelshtam, C. Silva, *Non-Rigid Rank-One Infinite Measures on the Circle.* (2023) Dynamical Systems, DOI: 10.1080/14689367.2023.2174412. Link: arXiv:1810.11095.
Scholarships	**NSF Graduate Research Fellowship Program** (Awarded in 2019) **Undergraduate Academic Excellence Award (CIMAT)** I received this scholarship every semester since fall 2014 until graduation.
Teaching Assistantships	**Department of Mathematics, Northwestern University** Teaching assistant for: (i) Math-202 Finite Mathematics. (Winter 2023) (ii) Math-285-2 Accelerated Mathematics for MMSS. (Winter 2023) (iii) Math-368 Introduction to Optimization. (Winter 2022) (iv) Math-226 Sequences and Series". (Fall 2021) (v) The Mathematics of Chaotic Dynamical Systems College-preps e-FOCUS Seminars. (Summer 2021) (vi) Math-202 Finite Mathematics. (Fall 2020, fully remote) Responsibilities included grading homework assignments and exams and giving discussion sessions. Additionally, I was a grader for several calculus courses (2019-2020). **Department of Mathematics, Universidad de Guanajuato** Teaching assistant for "Introduction to Probability and Statistics". Responsibilities included grading homework assignments and giving discussion sessions. (Spring 2018)

Talks and Presentations	"The stabilized automorphism group of low complexity subshifts" Low Complexity Dynamical Systems at Brin Mathematics Research Center, University of Maryland, College Park (2023)

"The stabilized automorphism group of Toeplitz shifts" Analysis and Mathematical Physics Seminar Meeting at Virginia Tech (2023)

"The stabilized automorphism group of odometers " Dynamical Systems Seminar at Northwestern University (2022)

"Models on the unit square of the Chacón, Pascal and other cutting and stacking transformations" (Ten minute talk and poster) Joint Mathematics Meetings, Baltimore, Maryland January 2019.

"Non-rigid rank-one infinite measures on the circle" (Ten minute talk and poster) Joint Mathematics Meetings,Baltimore, Maryland January 2019.

"The Central Limit Theorem in Free Probability: A Combinatorial Proof" Identity Seminar, Autonomous University of Querétaro, 2017.

"The Central Limit Theorem in Free Probability: : A Combinatorial Proof" Summer School of Probability and Statistics, CIMAT 2016. |
| Research Experiences as an Undergraduate | **SMALL program at Williams College (2018)** Mentor: Cesar E. Silva Title: "Non-Rigid Rank-One Infinite Measures on the Circle." Team: Ergodic Theory.

Summer REU at the University of Michigan (2017) Mentor: Harrison Bray. Title: "Random Walks on the Fundamental Group of the Once Punctured Torus." (Topological Dynamics) |
| Service | Graduate student mentor for the Causeway Program at Northwesten University (2021-present)

Organizer of the Graduate Student Seminar at the Mathematics department of Northwestern University, From September 2021 to February 2023.

Graduate student mentor for the Northwestern University Association for Women in Mathematics (Spring 2021)

Member of the Organizational Committee of the National Mathematics Olympics for Middle School Students (ONMAPS) for the state of Guanajuato. Activities include preparing, proctoring and grading selection tests, as well as, training the selected students. We also give classes to teachers on how to train students for the competition. From 2016 to 2019.

Former member of the organizing committee of the weekly undergraduate seminar sessions at the Mathematics department of the University of Guanajuato. From January 2015 to July 2016. |

Former volunteer at the Public Dissemination of Science department of CIMAT. From 2014 to 2015.

Awards   Silver medal Mexican Math Olympics State level competition (Querétaro).

Languages and Skills   Spanish (native), English (native), Italian (advanced)
C, C++, R, LaTex.