

Andrés Casillas García de Presno

Adolfstrasse 75 53111, Bonn, Germany

Born: 02/08/1999 (August 2nd, 1999) in Mexico City, Mexico.

+4915754942159 a.casillasgdp@gmail.com s67acasi@uni-bonn.de

Education

since 08.2023

Bonn University, Bonn, Germany.

Mathematics - Master of Science (M.Sc.)

Major areas: Discrete mathematics, numerical analysis, probability theory.

Courses taken: Combinatorial Optimization, Scientific Computing, Programming Methods in Scientific Computing.

Current courses: Approximation Algorithms, Local Search Algorithms, Inverse Problems in Mathematical Biology, Boundary Element Methods, Seminar in Advanced Algorithms: Online Algorithms.

08.2019-06.2023

National Autonomous University of Mexico (UNAM), Mexico City, Mexico.

Mathematics -Bachelor of Science (B.Sc.) 9.93/10 (Mexican grading system).

Thesis: A number theoretical approach to cellular automata.

08.2003-06.2019

Modern American School, Mexico City, Mexico.

 $Kinder garten, Primary \, school, \, Middle \, school \, and \, High \, school.$

8.55/10 (Mexican grading system).

Working Experience	
	Fraunhofer Institute for Algorithms and Scientific Computing
Since September 2025	Student research assistant (Prof. Dr. Marc Alexander Schweitzer)
Summersemester 2022 &Wintersemester 2022	National Autonomous Univeristy of Mexico (UNAM), Mexico City, Mexico. / Assistant Professor Linear Algebra I (<i>Professor</i> : Dr. Diana Avella Alaminos) Higher Algebra II (<i>Professor</i> : Dr. Diana Avella Alaminos) Higher Algebra II (<i>Professor</i> : Dr. Diana Avella Alaminos)
Wintersemester 2020 & Summersemester 2021 01.2018-06-2023	 Differential and Integral Calculus I (<i>Professor</i>: Act. Javier Fernández García) Differential and Integral Calculus II (<i>Professor</i>: Act. Javier Fernández García)
	Self employed / Private teacher
	Mathematics and physics
_	
Honors and Grants	
10.2024	Mexican Mathematical Society (SMM) , Mexico City, Mexico / Sotero Prieto 2024 medal
	The Sotero Prieto 2024 medal is awarded to the best bachelor's thesis in mathematics in the country.
07.2023	National Autonomous University of Mexico (UNAM), Mexico City, Mexico. / Diploma of Academic Excellence
	The diploma of academic excellence is awarded to the student with the second highest average in each programme.
	Instituto de Matemáticas (UNAM), Mexico City, Mexico. / Scholar
01.2021-07.2023	Academic excellence scholarships granted by the Institute of Mathematics are awarded to outstanding mathematics students.
	TELMEX-Telcel Foundation scholarship
01.2019-01.2022	The TELMEX-Telcel Foundation financially supports outstanding students in a variety of technical areas.

Research and Publications

08.2022

5th Mexican Workshop on Fractional Calculus (5th MWFC),

Tecnológico de Monterrey, Monterrey, Mexico.

Invited speaker.

06.2021-03.2022

Research assistant at Engineering Institute (UNAM), Mexico City,

Mexico.

Advisor: Dr. Francisco Antonio Godínez Rojano.

Developed algorithms for fitting Mittag-Leffler functions to experimental data in order to build models which described thermodynamic properties

of certain fluids, specifically water.

2022

Published work: de Presno, A. C.-G., & Godínez, F. A. (2022).

Construction of empirical models via a stepwise fitting of a fractional Newtonian cooling law. In Fractals. World Scientific Pub Co Pte Ltd.

Programming Skills

Julia (Intermediate)

• Python (Intermediate)

• Fortran (Intermediate)

• C++ (Intermediate)

• Mathematica (Basic)

• RStudio (Basic)

• C (Basic)

Language Skills

• Spanish (Native speaker)

• English (C2)

• French (A2)

• German (A2)