{Javier:Martínez Perales}

Data Science & Harmonic Analysis

javicemarpe(at)gmail.com

Personal webpage

EMPLOYMENT:{

"**SUBSTITUTE TEACHING TUTOR** at University of Málaga, from Feb 2022 to Present. Teaching basic and multidimensional calculus, vector calculus, probability and differential equations to undergraduate students in the University of Malaga's bachelor's degree in Chemistry",

"**LEAD DATA SCIENTIST** at Student Success, from Sept 2021 to Apr 2022. Data science with data from Google Classroom. Analysis of engagement of students, STEM–HASS profile of students, prediction of califications...",

"**POSTDOCTORAL VISITING FELLOW** at Basque Center for Applied Mathematics, from Feb 2021 to Sept 2021. Harmonic Analysis and Differential Equations: New Challenges. In this project we studied multifractality and intermmittency properties of certain stochastic processes coming from physics. We needed ideas from Harmonic Analysis, Number Theory and Probability theory to study these topics",

"**PREDOCTORAL RESEARCHER** at Basque Center for Applied Mathematics, from Sept 2016 to Dec 2020. During these years I studied different problems on Harmonic Analysis, from singular integral operators to Poincaré–Sobolev inequalities both in Euclidean and abstract metric spaces. This culminated in the development of a new method to get Poincaré–Sobolev inequalities in different settings. This is collected in my thesis dissertation" }

SKILLS = [

"**TECHNICAL SKILLS**
Proficient with:
Python ● Git ● LaTeX ● Adobe Photoshop ● Angular ● Flask
Familiar with:
HTML ● PHP ● SQL ● Adobe Illustrator ● Docker",

"**SOFT SKILLS**
Strong:
Spanish (mother tongue) ● English (B2 level) ● Initiative ● International Teamwork ● Public talks

Basic knowledge:
Italian ● Euskera "   ]

EDUCATION:{

"**PhD degree in Mathematics and Statistics** at Basque Center for Applied Mathematics, from Sept 2016 to Dec 2020.",

"**Master's degree in Mathematics and Statistics** at Universities of Almería, Cádiz, Granada, Jaén and Málaga, from Sept 2015 to Jul 2016.",

"**Bachelor's degree in Mathematics** at University of Málaga, from Sept 2011 to Jul 2015." }

RESEARCH = [

- Ritva Hurri-Syrjänen et al. "On the BBM-phenomenon in fractional Poincare–Sobolev inequalities with weights". In: International Mathematics Research Notices (Sept. 2022). rnac246. ISSN: 1073-7928. DOI: 10.1093/imrn/rnac246. URL: https://doi.org/10.1093/imrn/rnac246
- Javier C Martínez-Perales, Ezequiel Rela, and Israel P Rivera-Ríos. "Quantitative John–Nirenberg inequalities at different scales". In: Revista Matemática Complutense (2022), pp. 1–35. ISSN: 1139-1138. DOI: 10.1007/s13163-022-00427-0
- Dariusz Kosz et al. "Maximal operators on the infinite-dimensional torus". In: Mathematische Annalen (2022), pp. 1–39
- Javier C. Martínez-Perales. "A note on generalized Poincaré–type inequalities with applications to weighted improved Poincaré-type inequalities". In: Ann. Acad. Sci. Fenn. Math., 46 (2021). arXiv: 1907.12435v1 [math.CA]
- Eugenia Cejas, Irene Drelichman, and Javier C. Martínez-Perales. "Improved fractional Poincaré type inequalities on John domains". In: Ark. Mat. 57.2 (Oct. 2019), pp. 285–316. arXiv: 1902.10578
- Natalia Accomazzo, Javier C. Martínez-Perales, and Israel P. Rivera Ríos. "On Bloom type estimates for iterated commutators of fractional integrals". In: Indiana U. Math. J. 69.4 (2020), pp. 1207–1230   ]

ABOUT ME = [

INTERESTS:
Technology ● Programming ● Mathematics
ASSOCIATIONS:
RSME ● ANEM   ]