Miquel Ortega | Curriculum Vitae

Education

PhD student in Mathematics Universitat Politècnica de Catalunya (UPC)

Co-supervised by Juanjo Rué and Oriol Serra

2022-present **UPC**

Master in Advanced Mathematics and Engineering

2021-2022

Degree in Mathematics

UPC 2016-2021

Degree in Computer Science

UPC 2016-2021

Preprints

o On the number of monochromatic solutions to multiplicative equations, with Lucas Aragão, Jonathan Chapman and Victor Souza. Submitted. To appear in Combinatorica. arXiv: 2311.18742.

Publications

- o Product-free sets in the free group, with Juanjo Rué and Oriol Serra. Mathematika, Volume 70 (2024) no. 3. arXiv: 2302.03748.
- o Extremal sidon sets are Fourier Uniform, with applications to partition regularity, with Sean Prendiville. Journal de théorie des nombres de Bordeaux, Volume 35 (2023) no. 1, pp. 115-134. arXiv: 2110.13447.

Teaching

Probability Theory FME, UPC Fall 2022, 2023, 2024 Teaching assistant. FIB, UPC

Statistics and Probability 1 Teaching assistant.

Spring 2023

Student mentorship Mentored a group of junior undergraduate students during one year **UPC**

2021

Talks

Contributed talks at conferences.....

Discrete Mathematics Days '24 Alcalá de Henares A canonical van der Waerden theorem 5/7/2024

Eurocomb '23 **Prague**

Product-free sets in the free group 1/9/2023

CANT New York (online) Product-free sets in the free group 24/5/2023

Discrete Mathematics Days '22 Santander Extremal Sidon sets are Fourier uniform 6/7/2022

Research stays

University of California, San Diego

Research stay under the Randnet program, supervised by Lutz Warnke

Instituto de Matemática Pura e Aplicada

Research stay under the Randnet program

Lancaster University

Bachelor thesis, funded by the CFIS program

Supervisor: Sean Prendiville

San Diego

November 2024

Rio de Janeiro

March 2023

Lancaster

September 2020 – February 2021

Outreach

- Member of the jury for the 2023 Catalan math olympiads.
- Member of the jury for CiMs-CELLEX 2022 scholarships.

Scholarships

- o FPI grant 2021 (Spanish government research agency grant for graduate studies).
- o CFIS scholarship 2016 (double degree scholarship program), awarded.
- o CIMS Cellex Program 2015 (baccalaureate scholarship specialised in mathematics and physics), awarded.

Other Work Experience

• Worked for six months (2022) at Semidynamics, a chip design company.