

Curriculum Vitae

Alexandru Pascadi

Email: pascadi@maths.ox.ac.uk

Phone: +44 778 710 8232 / +40 762 243 944

Education

October 2021 – Present **Institution:** *Mathematical Institute, University of Oxford*
Program: DPhil in Mathematics (3rd year of 4)
Supervisor: Prof. James Maynard
Topics: Analytic Number Theory, Additive Combinatorics

September 2017 – June 2021 **Institution:** *University of California, Los Angeles*
Degrees: M.A. in Pure Mathematics
B.S. in Mathematics of Computation
GPA: 4.0 / 4.0

Publications & Preprints

Pascadi, A. (2023). Smooth numbers in arithmetic progressions to large moduli. Preprint, arxiv:2304.11696, submitted for publication.

Pascadi, A. (2023). The sparse regularity method with Schatten norms and Shannon entropy. Preprint, arxiv:2305.08567, submitted for publication.

Pascadi, A. (2022). Computer-assisted proofs of congruences for multipartitions and divisor function convolutions, based on methods of differential algebra. *The Ramanujan Journal*, 57(1), 1-36.

Pascadi, A. (2021). Several new product identities in relation to Rogers–Ramanujan type sums and mock theta functions. *Research in the Mathematical Sciences*, 8(1), 1-58.

Gillman, N., Kural, M., Pascadi, A., Peng, J., & Sah, A. (2020). Patterns of primes in the Sato–Tate conjecture. *Research in Number Theory*, 6(1), 1-30.

Teaching

October 2021 – June 2023 **Mathematical Institute (Oxford)**
Tutor & Teaching Assistant

Led tutorials & revision classes for Analytic Number Theory and Information Theory. Presented solutions and marked homework.

July 2023 **AwesomeMath Summer Program**
Instructor

Held virtual lessons for a three-week course in Number Theory for advanced high school students, preparing for Olympiads.

September 2018 – June 2021 **Olga Radko Endowed Math Circle (UCLA)**
Instructor
Designed and taught weekly Olympiad-training lessons for students ranging from 6th to 9th grade. Focused on the Bay Area Mathematical Olympiad.

Other Activities

December 2023 **Undergraduate Admissions (Corpus Christi College, Oxford)**
Held interviews for prospective undergraduate students in Mathematics, together with Prof. Paul Dellar. Assigned marks and wrote short evaluations.

2020 – Present **Peer Review**
Reviewed papers for *Journal d'Analyse Mathématique*, *Research in Number Theory*, and *Research in the Mathematical Sciences*.

2018 – 2021 **Undergraduate Mathematics Colloquium (UCLA)**
Organized one-hour lectures held by UCLA faculty on various mathematical topics, with up to 300 undergraduate attendees.

July 8–12, 2018 **International Mathematical Olympiad Marking & Coordination**
Marked and coordinated solutions for the number theory problem at IMO 2018, for 20 countries.

Awards

July 2022 **Garside Senior Scholarship (Corpus Christi College, Oxford)**
Awarded to one graduate student in Mathematics every two years

May 2021 **Daus Prize (UCLA)**
Awarded for cumulative performance in undergraduate and Master's studies

July 2019 **Spirit of Ramanujan STEM Fellowship**
Funded by the Templeton World Charity Foundation

June 2018 **Richard F. Arens Undergraduate Award (UCLA)**
Awarded for freshman year results

December 2017 **William Lowell Putnam Mathematical Competition**
Honorable mention, rank 39

September 2017 – June 2021 **Mathematics Undergraduate Merit Scholarship (UCLA)**
Awarded yearly to one incoming undergraduate student

July 2016 **International Mathematical Olympiad (Hong Kong)**
Silver medal, representing Romania