Curriculum Vitae

Alexandru Pascadi

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Education

October 2021 – August 2025	**Institution:**	*Mathematical Institute, University of Oxford*
	Program:	DPhil in Mathematics
	Supervisor:	Prof. James Maynard
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

✦ *Density theorems for* GL_n *via Rankin–Selberg L-functions*, with J.D. Lichtman. Preprint (2024).

✦ *Large sieve inequalities for exceptional Maass forms and applications.* Preprint (2024).

✦ *Smooth numbers in arithmetic progressions to large moduli.* Preprint (2023).

✦ *The sparse regularity method with Schatten norms and Shannon entropy.* Preprint (2023).

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

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

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

Teaching

October 2021 – June 2023	**Mathematical Institute (Oxford)** *Tutor & Teaching Assistant*
	Assisted and then led classes & consultation sessions for Analytic Number Theory and Information Theory. Presented solutions and marked homework.
July 2023 & 2024	**AwesomeMath Summer Program** *Instructor*
	Held virtual lessons for three-week courses in Number Theory (NT2) and Combinatorics (C3) 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

2022 – Present   **Conference & Seminar Talks**

Gave talks at Y-RANT 2024, Automorphic Forms in Budapest 2024 (speed-talk), and seminars in Stanford, CIRM Marseille, IIT Gandhinagar, Warwick, Bristol, LSE, Oxford. Scheduled for Columbia, Bonn, EPFL, IHP Paris.

2020 – Present   **Peer Review**

Reviewed papers for *Journal d'Analyse Mathématique*, *Research in Number Theory*, and *Research in the Mathematical Sciences*.

December 2023   **Undergraduate Admissions (Corpus Christi College, Oxford)**

Assisted with interviews for prospective undergraduate students in Mathematics. Asked questions, assigned marks, and wrote short evaluations.

November 2023   **Research Visit in Marseille**

Visited I2M/CIRM Marseille for one month, working with Sary Drappeau.

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 2018   **International Mathematical Olympiad Coordination (Romania)**

Marked & coordinated solutions for the number theory problem at IMO 2018.

Awards

July 2022 – September 2024   **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