Omri Nisan Solan - CV

Einstein Institute of Mathematics – Hebrew University of Jerusalem - Ph.D. student.

Website: omriso.github.io

Education:

- 2010 - 2015: Bachelor of Science, Mathematics, Tel Aviv University (Summa cum laude).
- 2015 - 2021: Master's student at Tel Aviv University, under the supervision of Prof. Barak Weiss (Summa cum laude).
- 2022 - 2025 (expected): Ph.D. student at the Hebrew University of Jerusalem, under the supervision of Prof. Elon Lindenstrauss.

Research Interest:

My primary research focus is on homogeneous dynamics. I leverage tools from number theory, probability, and algebraic topology to address problems in this field.

Teaching:
- 2023 - Teaching assistant, Hebrew University of Jerusalem, the course "Fundamental concepts in spectral analysis".
- 2024 - Teaching assistant, Hebrew University of Jerusalem, the course "Fundamental concepts in commutative algebra and algebraic geometry".

Awards:

- International Mathematical Olympiad, 2012 silver medal, 2013 gold medal, 2014 silver medal.
- International Mathematics Competition for University Students, 2014, First Prize, 2015 Grand First Prize & Prize for special solution, 2017 First Prize.
- Dean's award for distinguished students - Tel Aviv University (2015).
- Award of Excellence for Master's Studies Tel Aviv University (2021).

Active Participation in Scientific Meetings:
- 2015 - "Divergent Trajectories in $SL_3(R)/SL_3(Z)$", Dynamics & Probability - Hebrew University of Jerusalem, Israel.
- 2017 - "Stable and Well-Rounded Lattices in Diagonal Orbits" - Action Now Wandering Seminar, Ben Gurion University, Israel.
- 2021 - "Parametric Geometry of Numbers with General Flows", Diophantine Analysis and Related Topics, online conference.
- 2021 - "Geometry of the Casp and Divergent Trajectories", Dynamics & Probability - Hebrew University of Jerusalem, Israel.

- 2022 - "Algebraic Divergence and Geometry of Symmetric Spaces", Groups & Dynamics Seminar - Tel Aviv University, Israel.
- 2023 – "Limits of Compact Diagonal Orbits in the Lattice Space", 'Diophantine Analysis, Dynamics and Related Topics' conference - Technion, Israel.
- 2024 - "Divergence of large dimensional diagonal orbits", 'Diagonal actions in the space of lattices' workshop - Ecole Polytechnique, Palaiseau, France.
- 2024 - "Gap in critical exponents of $SL_2(\mathbb{R})$ orbits in nonarithmetic quotients of $SL_2(\mathbb{C})$", 'Group Actions with Hyperbolicity and Measure Rigidity' workshop - Institut Henri Poincare, Paris, France.
- 2024 - "Gap in critical exponents of $SL_2(\mathbb{R})$ orbits in nonarithmetic quotients of $SL_2(\mathbb{C})$", 'Distribution of orbits: Arithmetics and Dynamics' workshop - Paxmontana Switzerland.
- 2024 - "Gap in critical exponents", 'Recent Trends in Homogeneous and Teichmuller Dynamics' workshop - Maryland.
- 2024 - "Gap in critical exponents", Dynamical Systems Seminar - Penn State University.
- 2024 - "Gap in critical exponents", Group Actions, Geometry and Dynamics - Yale University.

Service to the Community:
- 2015 - 2017 - Trainer in the Israeli Mathematical Olympiad Program.
- 2019 - 2021 - Private tutoring of the Mathematical Olympiad.