

Shira (Giat) Tanny

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Date of birth: 19.07.1989

Appointments	09.2021-08.2024	Member of the School of Mathematics at IAS, Princeton.
Education	Ph.D.	Tel-Aviv University, Mathematics, 2015-2021 (approved in 2022). Thesis: Symplectic invariants of packings and covers: soft and hard approaches. Advisors: Prof. Lev Buhovski and Prof. Leonid Polterovich.
	M.Sc.	Weizmann Institute of Science, Mathematics, 2012-2014. GPA: 98. Thesis: Local Weyl Equivalence of Higher Order Fuchsian Equation. Advisor: Prof. Sergei Yakovenko.
	B.Sc.	Tel-Aviv University, Combined Physics - Mathematics Program, 2009-2012. GPA: 95, graduated <i>summa cum laude</i> .
Awards and Scholarships		Weizmann Institute's National Postdoctoral Award Program for Advancing Women in Science (declined), 2021 Zuckerman Israeli Postdoctoral Scholarship, 2021 Fulbright Postdoctoral Fellowship (declined), 2021 Rothschild Postdoctoral Fellowship, 2021 Eric and Wendy Schmidt Postdoctoral Award for Women in Mathematical and Computing Sciences, 2019 The Nehemia Levtzion Scholarship for Outstanding Doctoral Students from the Periphery, 2018 Istra Research award, 2017 Salim and Rachel Banin award, 2015 The Maria Proner-Pogonowska Scholarship for Women in Science, 2010-2013 Outstanding Student Award, Department of Math, Tel-Aviv University, 2012

Outstanding Student Award, Department of Physics, Tel-Aviv University, 2012

Dean's List, Faculty of Exact Sciences, Tel-Aviv University, 2011-2012

Publications and preprints

(authors in alphabetical order)

Lev Buhovsky and Shira Tanny. "A local-to-global inequality for spectral invariants and an energy dichotomy for Floer trajectories." PREPRINT (2022).

Julian Chaidez, Ipsita Datta, Rohil Prasad and Shira Tanny. "Contact homology and higher dimensional closing lemmas." PREPRINT (2022).

Shira Tanny. "A max inequality for spectral invariants of disjointly supported Hamiltonians." to appear in The Journal of Symplectic Geometry (2022).

Yaniv Ganor and Shira Tanny. "Floer theory of disjointly supported Hamiltonians on symplectically aspherical manifolds." to appear in Journal of Algebraic and Geometric Topology (2021).

Efim Gluskin and Shira Tanny. "Applications of Grothendieck's inequality to linear symplectic geometry." Annales mathématiques du Québec (2020): 1-9.

Lev Buhovsky, Alexander Logunov and Shira Tanny. "Poisson Brackets of Partitions of Unity on Surfaces." Commentarii Mathematici Helvetici 95.2, (2020): 247–278.

Shira Tanny and Sergei Yakovenko. "On Local Weyl Equivalence of Higher Order Fuchsian Equations." Arnold Mathematical Journal 1.2 (2015): 141-170.

Shira Giat, Yonathan Shelah, Clara Shikhelman and Yosef Yomdin. "Algebraic geometry of Abel differential equation." Revista de la Real Academia de Ciencias Exactas, Fisicas y Naturales. Serie A. Matematicas 108.1 (2012): 193-210.

Teaching Experience

10.2016-08.2021 Teaching assistant at Tel-Aviv university.
Courses: Calculus 2, Calculus 4, Complex Analysis, Differential Geometry and Algebraic Topology.

10.2014-01.2015 Teaching assistant at Weizmann Institute.
Course: Differential Topology.

Talks at conferences and seminars

Oct 2022 Geometry and Topology seminar, University of Maryland.

Oct 2022 AMS sectional meeting, University of Massachusetts Amherst.

Sep 2022 Connections Workshop: Floer Homotopy Theory, MSRI Berkeley.

Jun 2022 Frontiers of Quantitative Symplectic and Contact Geometry, Institut Mittag-Leffler, Sweden.

May 2022 IAS board meeting, Princeton.

Dec 2021 Analysis and Geometry seminar, IAS, Princeton.

Oct 2021 Mathematical conversations seminar, IAS, Princeton.

Nov 2021 Geometry and Topology seminar, MIT.

July 2021 Dynamische Systeme Workshop, Oberwolfach, Germany (virtual).

Apr 2021 Topology and Geometry Seminar, Hebrew University, Israel (virtual).

Mar 2021 Séminaire "Groupes de Lie et espaces des modules", Université de Genève (virtual).

Jan 2021 Western Hemisphere Virtual Symplectic Seminar, Columbia University (virtual).

Dec 2020 Geometry and dynamics seminar, Tel-Aviv University, Israel (virtual).

Dec 2020 Meeting of the Canadian Mathematical society, Symplectic Topology session, Canada (virtual).

Dec 2020 Symplectix Seminar at IHP Sorbonne Université, Paris (virtual).

Nov 2020 Symplectic Geometry Seminar at ETH Zürich (virtual).

Oct 2020 Symplectic Geometry Seminar at Ruhr-Universität Bochum (virtual).

Sep 2020 Symplectic Geometry Seminar at Stanford (virtual).

Sep 2020 Annual IMU (Israeli Mathematical Union) meeting, Analysis and Geometry session, Israel (virtual).

July 2020 Symplectic Zoominar, organized by CRM-Montreal, Princeton University, IAS, Tel Aviv, and Paris (virtual).

Dec 2019 Geometry and dynamics seminar, Tel-Aviv University, Israel.

July 2019 SMS2019 - Current trends in symplectic topology, Montreal, Canada.

- May 2019 C^0 aspects of symplectic geometry and Hamiltonian dynamics conference, Haifa, Israel.
- Dec 2018 Analysis seminar, Tel-Aviv University, Israel.
- Jun 2018 Geometry and dynamics seminar, Tel-Aviv University, Israel.
- Aug 2017 Computational Symplectic Topology conference, University of Cologne, Germany.
- May 2017 Geometry and dynamics seminar, Tel-Aviv University, Israel.

Other Academic Activities

- 2022-today Co-organizing the “What is...” seminar at IAS.
- 2021-today Co-organizing the Symplectic Zoominar.
- 2018, 2019, 2021 Organizing the symplectic students seminar at Tel Aviv University.
- 2015-2016 Co-organizing the TWIM (Tel Aviv Women In Mathematics) distinguished lecture series in the mathematics colloquium at Tel Aviv University.
- 2015 Co-organizing the first Israeli Workshop for Women in Mathematics, Tel Aviv, Israel.

Additional Research Experience

- Undergraduate Summer Program at the Weizmann Institute, during which I researched periodic solutions of a special case of the Abel differential equation (2011).
- Honors Program, Data analysis for CERN’s detectors at the High Energy Physics lab, at Tel-Aviv University (2011).

Employment and Service

- 08.2010-10.2010, 08.2012-10.2012 Quality assurance at Contextream, a company that specializes in software-defined networking (SDN).
- 10.2007-10.2009 National Service at the Ministry of Defense, Government of Israel. My position included software development and data analysis in Oracle environment.

Volunteer Work

- 2012-2014 Teaching high school mathematics at the Arabic high-school of engineering and science in Lod.

2012-2015 Tozeret Ha'aretz - student communities in Israel's socio-geographic periphery. I lived in Lod and volunteered in various projects around the city.

2009-2010 Volunteered at the "*Nachson*" project, mentoring underprivileged teens in math through the internet.

Other Skills

Programming Languages Mathematica, MATLAB, C, C++, SQL

Languages Fluent in Hebrew and English.