Shira (Giat) Tanny

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Date of birth: 19.07.1989

Appointments	08.2024-Today	Assistant Professor, Weizmann Institute of Science, Israel.
	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 Equations. Advisor: Prof. Sergei Yakovenko.
	B.Sc.	Tel-Aviv University, Combined Physics - Mathematics Program, 2009-2012. GPA: 95, graduated *summa cum laude*.

Awards and Scholarships

Alon Scholarship, 2024

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 Benin 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)	Aleksandra Marinkovic, Jo Nelson, Ana Rechtman, Laura Starkston, Shira Tanny and Luya Wang. ``Properties of contact toric structures and concave boundaries of linear plumbings." PREPRINT (2025)

Julian Chaidez and Shira Tanny. ``Elementary SFT spectral gaps and the strong closing property." PREPRINT (2023)

Lev Buhovsky and Shira Tanny. "A local-to-global inequality for spectral invariants and an energy dichotomy for Floer trajectories." to appear in Journal of Fixed Point Theory and Applications (2024).

Julian Chaidez, Ipsita Datta, Rohil Prasad and Shira Tanny. "Contact homology and higher dimensional closing lemmas." Journal of Modern Dynamics 20: 67-153 (2024).

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

Yaniv Ganor and Shira Tanny. "Floer theory of disjointly supported Hamiltonians on symplectically aspherical manifolds." Journal of Algebraic and Geometric Topology (2023).

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.

Selected Talks at conferences and seminars	Oct 2023	Dynamics seminar, Cornell, NY.
	Jun 2023	LP60: Geometry and Dynamics. A Conference in Honour of Leonid Polterovich, ETH Zurich.
	May 2023	Symplectic Dynamics, INdAM, Rome.
	May 2023	Symplectic Geometry, Gauge Theory, and Categorification Seminar, Columbia University, NY.
	Feb 2023	South Central Topology Conference, Texas state university.
	Jan 2023	Members Colloquium, IAS Princeton.
	Jan 2023	Geometry and Dynamics seminar, Tel Aviv University, Israel.
	Jan 2023	Geometry and Topology seminar, Hebrew university, Israel.
	Jan 2023	Geometry and Topology seminar, Weizmann Institute, Israel.
	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.
	2023-today	Organizing the IAS/PU symplectic geometry seminar.
	Jul 2023	Giving RTG minicourse, summer school in Geometry and Topology, Princeton University.
	2021-2023	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	2024-today	Assistance to Israeli undergraduate students affected by the war.
	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.