

Yoel Groman

Curriculum Vitae

Contact information

Hebrew University of Jerusalem
Einstein Institute of Mathematics
Manchester House 301
Email address: ygroman@mail.huji.ac.il

Higher Education

Ph.D., **Hebrew University of Jerusalem**, Mathematics, 2015.
M.Sc. *Magna Cum Laude*, **Hebrew University of Jerusalem**, Mathematics, 2011.
B.A. *Summa Cum Laude*, **Open University of Israel**, Mathematics, 2008.

Research interests

Differential geometry, symplectic geometry, Floer theory, mirror symmetry.

Employment

Hebrew University of Jerusalem
Senior Lecturer, July 2019-
Columbia University,
Simons Postdoctoral fellowship, July 2016- June 2019
ETH Zurich
Postdoctoral Research Scientist, September 2015-July 2016,

Awards and grants

2021-23: **BSF grant**
2020-24: **ISF grant**
2016: **Nessyahu prize**
2013: **Azrieli Foundation Graduate Fellowship**.
2013: **Zochovitzky Prize**, Hebrew University Math department.
2012: **Perelman Prize**, Hebrew University Math department.
2010: **Klein Prize**, Hebrew University Math department.

Papers

The local Floer cohomology of indicator functions, submitted, [arXiv:2307.11659](https://arxiv.org/abs/2307.11659),

Closed string mirrors of symplectic cluster manifolds (with U. Varolgunes), submitted, [arXiv:2211.07523](https://arxiv.org/abs/2211.07523),

Framed E2 structures in Floer theory (with M. Abouzaid and U. Varolgunes), submitted, [arXiv:2210.11027](https://arxiv.org/abs/2210.11027),

Locality of relative symplectic cohomology for complete embeddings, (with Umut Varolgunes, to appear in *Compositio Mathematica*, [arXiv:2110.08891](https://arxiv.org/abs/2110.08891),

The wrapped Fukaya category for semi-toric SYZ fibrations, to appear in *JEMS*, [arXiv:1805.03635](https://arxiv.org/abs/1805.03635),

The symplectic cohomology of magnetic cotangent bundles, (with Will J. Merry), to appear in *Commentarii Mathematici Helvetici*, [arXiv:1809.01085](https://arxiv.org/abs/1809.01085),

Floer theory and reduced cohomology on open manifolds, to appear in *Geometry and Topology*, [arXiv:1510.04265](https://arxiv.org/abs/1510.04265).

A thick thin decomposition of J-holomorphic curves, preprint [arXiv:1311.7564](https://arxiv.org/abs/1311.7564).

J-holomorphic curves with boundary in bounded geometry (with Jake P. Solomon), *J. Symplect. Geom.* 14 (2016), no. 3, 767-809, [arXiv:1311.7484](https://arxiv.org/abs/1311.7484).

A reverse isoperimetric inequality for J-holomorphic curves (with Jake P. Solomon), *Geom. Funct. Anal.* 24 (2014), no. 5, 1448-1515, [arXiv:1210.4001](https://arxiv.org/abs/1210.4001), DOI: [10.1007/s00039-014-0295-2](https://doi.org/10.1007/s00039-014-0295-2).

Students and mentorship

Pranav Chakravarty 2021-2023, Postdoc

Ron Harel, 2022 -, Msc candidate

Guy Dorenstein, 2023 -, Msc candidate

Alejandro Vicente, 2023-, Postdoc

Academic activities

_____ Spring 2016, co-organizer, **Informal seminar on Viterbo's theorem**, ETH Zurich

_____ Spring 2016-2019, co-organizer, **Symplectic Geometry, Gauge Theory and Categorification Seminar**, Columbia university

_____ July 2019-present, co-organizer, **Geometry and Topology Seminar**, Hebrew university

Talks at conferences

July 2022, **Mirror Symmetry for Looijenga Interiors and Beyond**, Bogazici University

September 2020, **Floer-theoretic and algebro-geometric aspects of SYZ mirror symmetry**, UC Berkley (Online)

March 2018, **Mirror Symmetry and Enumerative Geometry**, UC Berkley

January 2017, **Workshop on HMS**, university of Miami

Selected Invited Talks

March 2023, **Symplectic Geometry Seminar**, Stanford University

March 2023, **M-Seminar**, KSU

June 2022, **Symplectic Zoominar**
July 2021, **Western Hemisphere Virtual seminar**
October 2018, **Mirror Symmetry Seminar**, Rutgers

December 2017, **Symplectic Geometry Seminar**, ETH Zurich
December 2017, **Geometry and Topology Seminar**, Hebrew University of Jerusalem
October 2017, **Symplectic Geometry Seminar**, IAS
October 2016, **Symplectic Geometry Seminar**, University of Hamburg
October 2015, **Symplectic Geometry, Gauge Theory and Categorification Seminar**,
Columbia university.
October 2015, **Symplectic Geometry Seminar**, ETH Zurich
June, 2015, **Workshop on Symplectic Geometry and Mathematical Physics**, Sechuan
university
May, 2015, **Geometry and Topology Seminar**, Bar Ilan university
May, 2015, **Geometry and Topology Seminar**, Hebrew University of Jerusalem
June 2014, **Joint meeting of the AMS and IMU**, Tel Aviv University
April 2014, **Geometry and Topology Seminar**, Haifa University
May 2013, **Analysis Seminar**, Hebrew University of Jerusalem
March 2012, **Symplectic Geometry Seminar**, Tel Aviv University
January 2012, **Mathematics Colloquium**, Hebrew University of Jerusalem.

Teaching Experience

Fall 2022-2023, Differential Geometry of Curves and Surfaces

Fall 2022-2023, *Measure Theory*, Hebrew University

Spring 2022, *Point Set topology*, Hebrew University

Fall 2021-2022, *Category Theory*, Hebrew University

Fall 2020-2021, *Differential Geometry*, Hebrew University

Fall 2019-2020, *Differential Geometry*, Hebrew University

Spring 2019, *Calc III*, Columbia University.

Spring 2018, Topics in Symplectic topology, Columbia University

Spring 2017, *Calc III*, Columbia University.

Spring 2015, *Advanced calculus II*, teaching assistant, HUJI.

Spring 2014, *Advanced calculus II*, teaching assistant, HUJI.

Spring 2013, *Advanced calculus II*, teaching assistant, HUJI.

Fall 2012-2013, *Linear algebra for chemists*, teaching assistant, HUJI.

Spring 2012, *Differential geometry*, teaching assistant, HUJI.

Fall 2011-2012, *Applied mathematics I*, teaching assistant, HUJI.

