

CV OF OMRI MOSHE SARIG

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CAREER TRACK

EMPLOYMENT.

2014-present Full Professor, Weizmann Institute of Science
Head of the Mathematics Department (2014-2018)
Theodore R. and Edlyn Racoosin Chair (2010-present)
2009-2014 Associate Professor, Weizmann Institute of Science
2006-2011 Associate Professor, The Pennsylvania State University
2003-2006 Assistant Professor, The Pennsylvania State University
2000-2003 Warwick Zeeman Lecturer, Warwick University

EDUCATION.

2001 Ph.D. (with distinction), Tel-Aviv University, Supervisor: J, Aaronson
1997 M.Sc. (summa cum laude), Tel-Aviv University, Supervisor: J, Aaronson
1994 B.Sc. (summa cum laude), Tel-Aviv University

RECOGNITION

HONORS.

2024: Plenary Speaker, XLIV Dynamics Days Europe
2023: Frontiers of Science Award
Plenary Speaker, Brazilian Mathematical Colloquium
2016: Semi-Plenary Speaker, British Mathematics Colloquium
2013: Michael Brin Prize in Dynamical Systems
Erdős Prize (Israel Mathematical Union)
Levinson Prize in Mathematics (Weizmann Institute)
2010 Invited Speaker, ICM, Hyderabad
2006 Sloan Research Fellowship (Alfred P. Sloan Foundation)
2002: Nessyaho Prize for PhD's in mathematics in Israel for the year 2001
Award to Newly Appointed Lecturers (Nuffield Foundation)
2000 Gilboa Award for Research Students (Wolf Foundation)

GRANTS.

- 2025 Minerva 714824, two years, PI
- 2022 ISF (Israel Science Foundation) 264/22, four years, PI
- 2017 BSF (US-Israel Binational Science Foundation) 2016105, four years, co-PI
- 2018 ISF 1149/18, four years, PI
- 2014 ISF 199/14, four years, PI
- 2009 ERC Starting Grant 239885, five years, PI
- 2007 NSF 0652966, three years, PI
- 2004 NSF 0400687, three years, PI
- 2002 EPSRC Grant GR/R90406/01, for a year-long symposium, co-PI

INVITED LECTURE SERIES.

(Items marked by (*) have lecture notes available from my homepage.)

- 2024 *Equidistribution of Discrepancy Sequences*, Penn State (2 lectures)
- 2023 *Overview of Ergodic Theory & Dynamical Systems for Physicists* *
(6× 2hr lectures), Physics Department, Weizmann Institute
- 2020 *The Transfer Operator Method* * (5 lectures)
Hausdorff Research Institute for Mathematics, Bonn
- 2016 *Thermodynamic Formalism for Countable Markov Shifts* * (3 lectures)
Schrödinger Institute, Vienna
- 2015: *Basic Ergodic Theory* (5 lectures)
Gulbenkian Foundation Summer School, Lisbon
- Horocycle Flows on Surfaces with Infinite Genus* * (3× 2hr lectures)
Tata Institute for Fundamental Research, Mumbai
- 2014 *Symbolic Dynamics for Geodesic Flows* (2 lectures)
Penn State University, State College, USA
- 2013: *Thermodynamic Formalism for Countable Markov Shifts* (3 lectures)
EPFL, Lausanne
- The Transfer Operator Method* (2× 2hr lectures)
Penn State University, State College, USA
- Markov Partitions for Diffeomorphisms* (3× 2hr lectures)
Copernicus University, Toruń, Poland
- 2012: *Introduction to the Transfer Operator Method* (5 lectures)
Second Brazilian School on Dynamical Systems, São Carlos, Brazil
- Infinite Invariant Measures for Horocycle Flows* (4 lectures)
Ergodic Geometry and Dynamics on Moduli Space, CIRM, Luminy, France
- Markov Partitions for Surface Diffeomorphisms* (5 lectures)
ICTP, Trieste, Italy
- Markov Partitions for Surface Diffeomorphisms* (3× 2hr lectures)
Poncelet Laboratory, Moscow

- 2011 *Introduction to ergodic theory* (5 two-hour lectures)
 Modern dynamics and its interactions with analysis, geometry,
 and number theory, Będlewo, Poland
Markov partitions for surface diffeomorphisms (2 lectures)
 Workshop on ergodic theory and dynamical systems, Warwick, UK
Markov partitions for surface diffeomorphisms (3 two-hour lectures)
 Working seminar on dynamical systems, Penn State, USA
- 2006 *Critical phenomena for dynamical systems* (3 lectures)
 Global Dynamics Beyond Uniform Hyperbolicity, Northwestern, Illinois, USA
- 2003 *Thermodynamic formalism for countable Markov shifts* (3 lectures)
 Rennes seminar on dynamical systems, Rennes, France
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TEACHING AND OUTREACH

GRADUATE STUDENTS & POST-DOCS

- Post-docs Dr. Debanjan Nandi, Weizmann Institute, 2020–present
 Dr. René Rühr, Weizmann Institute, 2020–2023
 Dr. Younghwan Son, Weizmann Institute, 2013–2015
 Dr. Yuri Lima, Weizmann Institute, 2011–2013
- Ph.D. Snir Ben-Ovadia, Weizmann Institute, graduated 2021
 Thesis title: *Symbolic Dynamics and Physical Equilibrium Measures in Non-Uniformly Hyperbolic Dynamics*
 Ofer Shwartz, Weizmann Institute, graduated 2020
 Thesis title: *Thermodynamic formalism of transient potentials*
 Yair Hartman, Weizmann Institute, graduated in 2015
 Thesis title: *Stationary Actions, Random Walks on Groups and Furstenberg Entropy*
 Godofredo Iommi, Warwick University, graduated in 2004
 Thesis title: *Multifractal analysis for countable Markov shifts*
 Van T. Cyr, Penn State University, graduated in 2010
 Thesis title: *Transient Markov shifts*
- M.Sc. Aviv Ruimi, Weizmann Institute, on-going
 Yair Daon, Weizmann Institute, graduated in 2012
 Thesis title: *Bernoullicity of equilibrium measures on countable Markov shifts*
 Snir Ben-Ovadia, Weizmann Institute, graduated 2017
 Thesis title: *Symbolic dynamics for diffeomorphisms of compact smooth manifolds with non-vanishing Lyapunov exponents*
- Summer Student Eduard Duriev, Weizmann Institute (Kupciner-Getz program) 2012
 Project: *Random walks driven by irrational rotations*

NEW LECTURE COURSES DESIGNED.

Graduate: *Ergodic Theory* * (Weizmann, Penn State)
 Thermodynamic Formalism * (Penn State)
 Dynamical Systems (Year-Long)

Advanced UG: *Measure Theory* * (Warwick)
 Probability From an Analytic Point of View (Penn State)
 Linear Analysis (Penn State)

BOOK.

Dolgopyat, Dmitry; Sarig, Omri M.: *Local limit theorems for inhomogeneous Markov chains.*, Lecture Notes in Math., **2331** Springer, 2023, xiii+340 pp.

STANDARD LECTURE COURSES TAUGHT.

Calculus, Calculus with Analytic Geometry, Classical Analysis, Complex Analysis.
 For shorter lecture series and mini-courses, see page 2.

OTHER TEACHING ACTIVITIES.

Lectures to mathematically gifted high-school youths or advanced undergraduates:

2023 Ulpana De Shalit, Weizmann Institute

2013 Open day for prospective students, Weizmann Institute

2012 Ulpana De Shalit, Weizmann Institute
 Math Olympiad Club, Weizmann Institute
 Kupcinet–Getz Summer program, Weizmann Institute

2011 PMASS (special semester for advanced undergraduates), Penn State University

2003 Mathematics Club, State College Area High School, Pennsylvania

SERVICE

EDITORIAL BOARDS.

2013–present *Journal of Modern Dynamics*, Member
 2018 Roy Adler Memorial Issue, *Journal of Modern Dynamics* , Co-Editor
 2004 Special Volume of *Stochastics & Dynamics* (March Issue), Co-Editor

PRIZE COMMITTEES.

- 2025 Frontiers of Science Award, Global Committee
- 2024 Frontiers of Science Award, Subject Committee (Dynamics) and Global Committee
- 2022 Junior Brin Prize Committee (Member)
- 2020 Junior Brin Prize Committee (Member)
- 2018: Junior Brin Prize Committee (Member)
ICM Program Committee (Panel Member)
- 2017 Nessayho Prize Committee (Chair)
- 2016 Junior Brin Prize Committee (Member)

REFEREEING (GRANT PROPOSALS).

- Canada: Natural Sciences & Engineering Research Council
- Chile: The Chilean Research Fund Council
- EU: European Research Council
- France: Agence National de la Recherche
- Poland: Narodowe Centrum Nauki
- Portugal: Fundação para a Ciência e a Tecnologia
- Germany: Einstein Stiftung Berlin
- Israel: Israel Science Foundation
- UK: EPSRC
- US: NSF, Simons Foundation

CONFERENCES ORGANIZED.

- 2019 *Dynamics, geometry, and combinatorics*
Bernoulli center, EPFL, Lausanne, Switzerland (October 21-25, 2019)
- 2018 *Two day meeting on infinite ergodic theory (Aaronson-fest)*
Hebrew University, Jerusalem (February 13–14, 2018)
- 2017 *A workshop on mathematical physics*
Weizmann Institute of Science, (January 24–25, 2017)
- 2011 *Section on ergodic theory and dynamical systems*
Annual meeting of the Israel Mathematical Union, Bar-Ilan (June 16 2011).
- 2010 *Action Day Seminar*
Weizmann Institute (December 3, 2010)
Infinite Ergodic Theory and Related Fields
Weizmann Institute (June 27–July 1, 2010)

- 2008 *Penn State–Maryland Workshop on Dynamics*
Penn State (October 23–26, 2008)
- 2007 *Dynamical Ideas in Geometry, Topology and Number Theory*
Penn State (May 5–6, 2007)
- 2003 *Symbolic Dynamics and Ergodic Theory*
Warwick (July 7–August 18, 2003)
Year long symposium on Geometric and Probabilistic Aspects of Dynamics
Warwick, 2002–2003
- 2001 *Complex Dynamics and Ergodic Theory*
Warwick (January 19–21, 2001)

REFEREEING (PAPERS).

Advances Math	American J. Math	Annals of Math	
Ann. Inst. H. Poincaré	Bulletin SMF	Comm Math Phys	DCDS
Duke Math J	Ergodic Th Dynam Syst	Fundamenta Math	
IMRN	Inventiones Math	Israel J Math	
J. Amer Math Soc	J of Modern Dynamics	J Stat Phys	
Letters in Math Phys	Math Research Letters	Nonlinearity	Pacific J Math
Prob Th Related Fields	Proc AMS	Proc LMS	Springer LNM
Stoch & Dynam	Studia Math	Trans AMS	

ADMINISTRATION.

Head of the Department of Mathematics (2014–2018)
 Faculty Hiring Committee, member (2012–2018)
 Weizmann Institute Hiring Committee (“V9”), member, (2013–2017).
 Feinberg Graduate School Thesis Committee, member (2010–2014)

VISITING POSITIONS, CONFERENCES, SEMINARS, COLLOQUIA

VISITING POSITIONS.

- 2019 Univesité Paris-Sud, Paris, France, (3 months)
 IHÉS, Bures-sur-Yvette, France (1.5 months)
- 2013 Copernicus University in Toruń, Poland (one month)
- 2012 IMPA, Rio de Janeiro, Brazil (two weeks)

- 2011 Penn State University, Pennsylvania (two weeks)
- 2009 ETH, Zürich, Switzerland (one week)
- 2008 University of Surrey, Guildford, UK (two weeks)
- 2007 University of Notre Dame Indiana (two weeks)
- 2006 Princeton University, Princeton, New-Jersey (two weeks)
University of Bristol, Bristol, United Kingdom (two weeks)
Université Picardie Jules Verne, Amiens, France (two weeks)
- 2005 Institut Henri Poincaré, Paris, France (one month)
- 2004 Max-Planck-Institut für Mathematik, Bonn, Germany (one month)
Institut de Recherche Mathématique de Rennes, Rennes, France (two weeks)
- 2001 Institut des Hautes Études Scientifiques, Bures-sur-Yvette, France (two months)

INVITED TALKS IN CONFERENCES.

- 2023 Brazilian Mathematical Colloquium (Plenary Talk), Rio de Janeiro
- 2022 Ergodic Theory and Dynamical Systems, ICTS-TIFR, India (zoom)
Special Day on Ergodic Theory (Lin-fest), Ben-Gurion University
- 2021 Brazilian Mathematical Colloquium (zoom)
Expanding Dynamics IX, Northwestern, (zoom)
Interweaving in Dynamics, IMPAN, Będlewo (zoom)
Schmelting-Fest, Mittag-Leffler Institute, Stockholm (zoom)
Anosov Memorial Conference, Moscow (zoom)
- 2019 Beyond uniform hyperbolicity, CIRM, Marseille, France
Thermodynamic formalism, Mittag-Leffler, Stockholm, Sweden
Thermodynamic formalism, Warwick University, Coventry, UK
- 2018 Dynamics seminar, Scuola Normale Superiore di Pisa, Italy
Recent Progress in Ergodic Theory, RIMS, Kyoto, Japan
Ergodic aspects of dynamical systems, Będlewo, Poland

- 2017 Mathematical Congress of the Americas, Montreal, Canada
Bowen Legacy Conference, UBC, Vancouver, Canada
Workshop on Infinite ergodic theory and related fields, Tel Aviv Univeristy, Israel
- 2016 Ergodic geometry (Ledrappier-fest), Paris, France
Penn State-Maryland Conference, Penn State, State College PA, USA
- 2015 Fifty years of ergodic theory in Jerusalem, Hebrew university, Jerusalem
Ergodic theory and dynamical systems, Będlewo, Poland
- 2014 Ergodic Theory and Dynamical Systems, Toruń, Poland
Progress in Dynamics (Katokfest), Banff, Canada
- 2013 Ratnerfest, Hebrew University, Israel
German–Polish Joint Conference on Probability and Mathematical Statistics, Toruń
- 2012 Ergodic Theory and Number Theory, Tokyo, Japan
“Action Now” meeting, Hebrew University, Jerusalem
- 2011 Trends in dynamics, Northwestern, Evanston, USA
Workshop on dynamical systems, Penn State, State College, USA
Workshop on dynamical systems. University of Maryland, College Park, USA
Beyond uniform hyperbolicity 2011, Luminy, Marseille, France
Israel–Poland Mathematical meeting, Łódź, Poland
- 2010 International Congress of Mathematicians, Hyderabad, India
Meeting of the Israel Mathematical Union, semi-plenary talk
One day meeting on ergodic theory, Paris VI, France
- 2009 Workshop on dynamical systems and related fields, University of Maryland
Dynamical systems II, University of North Texas, Denton, USA
Special session on group actions on homogeneous spaces, AMS meeting, Washington DC
- 2008 Workshop on dynamical systems and related fields, University of Maryland, USA
Infinite ergodic theory, Université de Rennes, France
- 2007 Measures and Dynamics on Groups and Homogeneous Spaces, TATA, Mumbai, India
Nonuniformly Hyperbolic Dynamics, Instituto Superior Técnico, Lisbon, Portugal
Equadiff, Technical University of Vienna, Vienna, Austria
- 2006 Théorie ergodique en mesure infinie, Université Picardie Jules Verne
Bristol Sessions in Advanced Mathematics: Effective equidistribution, Bristol

- 2005 Dynamics and Related Fields, University of Maryland, MD
 Colloquium in Dynamical Systems and Smooth Ergodic Theory, Université Bordeaux 1
 Workshop on Probabilistic Limit Laws for Dynamical Systems, Edinburgh
 Rigidity, Dynamics, and Group Actions, Banff, Alberta, Canada

- 2004 Algebraic and Topological Dynamics, MPIM, Bonn, Germany
 Recent Progress in Dynamics, MSRI, CA
 Workshop on Dynamics, University of Maryland, MD
 Complex Dynamics, RIMS, Kyoto, Japan

- 2003 Hayashibara Forum, Oxford and Warwick, England
 Advances in Hyperbolic Dynamics, ETH Zürich, Switzerland

- 2002 LMS Meeting on Ergodic Theory, Manchester, England
 Holomorphic Iteration and Non-uniform Hyperbolicity, Warsaw, Poland
 Meeting on Dynamical Systems, Göttingen, Germany

- 2001 Théorie ergodique et systèmes dynamiques, Villetaneuse, Paris, France
 Partially Hyperbolic Dynamical Systems, University of Surrey, UK

- 2001 Non-Hyperbolic Dynamical Systems, Göttingen, Germany
 Systèmes Dynamiques, CIRM, Luminy, France
 Third UK-Japan Winter School, Bury st Edmunds, UK

- 1999 Harmonic Analysis and Zeta Functions, Göttingen, Germany
 Meeting on Random Dynamical Systems, MFO, Oberwolfach, Germany
 Israel Mathematical Union Meeting, Haifa University, Haifa, Israel

- 1997 Israel Mathematical Union Meeting, Bar-Ilan University, Israel

SEMINARS & COLLOQUIA.

- 2023 Dynamics seminar, POSTECH, South Korea (zoom)
 Dynamics seminar, ICTS, Vienna (not zoom!)

- 2022 Ergodic theory seminar, Hebrew University

- 2021 Dynamics seminar, University of Wisconsin in Madison (zoom)
 Ergodic theory seminar, Hebrew University

- 2020 Colloquium, Tel Aviv University (zoom)
Zürich Ergodic Theory and Dynamical Systems Seminar (zoom)
Resistência Dinâmica Webinar, Rio de Janeiro (zoom)

- 2019 Action Now Seminar, Weizmann, Israel
Statistical mechanics seminar, Weizmann, Israel
Ergodic theory seminar, Paris VI, France
Dynamics seminar, Paris-Sud, France
Dynamics seminar, Rennes, France
Ergodic theory seminar, KIAS, Seoul
Colloquium, POSTECH, Pohang, S. Korea
Homogeneous spaces seminar, Technion, Israel

- 2018 Dynamics seminar, Hebrew University, Jerusalem
Dynamics seminar, Centro de Giorgi, Pisa

- 2017 Colloquium, Northwestern University, USA
Dynamics seminar, University of Chicago, USA

- 2016 British Mathematical Colloquium, Bristol, UK
Yeshiva University Colloquium, New York City, USA
NYC dynamics seminar, New York City, USA
Ergodic theory seminar, Bristol, UK

- 2014 Universite of Paris-Sud, France
Université Nice Sophia Antipolis, France
Ben Gurion University, Beer-Sheba, Israel

- 2013 Institute of Mathematics of the Polish Academy of Sciences, Warsaw
Penn State University

- 2012 Moscow Independent University, Russia
IMPA, Rio de Janeiro, Brazil
University of São Paulo, Brazil
Hebrew University, Jerusalem
Tel Aviv University

- 2011 Northwestern, Evanston, USA
Penn State, University Park, USA
Technion, Haifa, Israel
Hebrew university, Jerusalem, Israel (colloquium)

- 2010 Hebrew university, Jerusalem, Israel (colloquium)
Penn State university, Tel-Aviv University

- 2008 Tel Aviv University, Israel
 CUNY, New York, USA
 University of Surrey, Guildford, UK
 University of Bristol, UK
 Warwick University, Coventry, UK
- 2009 Tel Aviv University, Israel (colloquium)
 Ben-Gurion University, Beer-Sheba, Israel (colloquium)
 Technion, Haifa, Israel (colloquium)
 Ohio State University, Columbus, USA (colloquium)
 ETH Zürich, Switzerland
- 2007 Tel Aviv University, Israel
 Hebrew University, Israel
 University of Chicago, IL
 Penn State University, State College, PA
 Ohio State University, Columbus, OH
- 2006 Hebrew University, Jerusalem, Israel
 Notre-Dame University, Southbend, IN
 Princeton University, Princeton, NJ
 University of Warwick, Coventry, England
- 2005 Ben-Gurion University, Beer-Sheva, Israel
 Caltech, Pasadena, CA
 Princeton University, Princeton, NJ
 Northwestern University, Evanston, IL
 Institut Henri Poincaré, Paris France (two hours)
- 2004 Hebrew University, Jerusalem, Israel
 Ben-Gurion University, Beer-Sheva, Israel
 Tel-Aviv University, Tel-Aviv, Israel
 University of Washington, Seattle WA
 Université de Rouen, Rouen, France
 Budapest University of Technology and Economics, Budapest, Hungary
 Cornell University, Ithaca, NY
 Ohio State University, Columbus, OH
 Courant Institute of Mathematical Sciences, New York, NY
 Penn State University, State College, PA (two talks)

- 2003 University of East-Anglia, Norwich, England
Georgia Institute of Technology, Atlanta, GA
Penn State University, State College, PA (two talks)
Warwick University, Coventry, England
University of Bristol, Bristol, England (colloquium)
- 2002 Technion, Haifa, Israel
Université de Rennes I (two talks)
Hebrew University at Jerusalem, Israel (two talks)
Tel-Aviv University, Israel (two talks)
Warwick University, Coventry, England (two talks)
- 2001 University of Manchester, Manchester, England
University of Liverpool, Liverpool, England (colloquium)
Tel-Aviv University, Tel-Aviv, Israel
Warwick University, Coventry, England
Université de Paris-Sud, Orsay, France
- 2000 Queen Mary University of London, London, England
Hebrew University at Jerusalem, Israel
Tel-Aviv University, Tel-Aviv, Israel
Warwick University, Coventry, England
- 1999 Université de Paris-Sud, Orsay, France
Hebrew University at Jerusalem, Israel
Tel-Aviv University, Tel-Aviv, Israel

(Last update: Jan. 2024)