

## CURRICULUM VITA OF OMRI MOSHE SARIG

### PERSONAL DETAILS

Faculty of Mathematics & Computer Science  
Weizmann Institute of Science  
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### EDUCATION

Post-doc    Position: Warwick Zeeman Lectureship  
              Place & Duration: Warwick University, Mathematics Institute, England, from 2000 to 2003  
              Mentor: P. Walters

Doctorate    Subject area: Mathematics  
              Degree: Ph.D. (with distinction), awarded in 2001  
              Place & Duration: Tel-Aviv University, from 1997 to 2000  
              Supervisor: J. Aaronson.  
              Thesis title: *Thermodynamic formalism for countable Markov shifts*

Master        Subject area: Mathematics  
              Degree: M.Sc. (summa cum laude), awarded in 1997  
              Place & Duration: Tel-Aviv University, from 1994 to 1997  
              Supervisor: J. Aaronson.  
              Thesis title: *Thermodynamic formalism for some countable topological Markov shifts*

Bachelor     Subject area: Mathematics  
              Degree: B.Sc. (summa cum laude), awarded in 1994  
              Place & Duration: Tel-Aviv University, from 1991 to 1994  
              (1989-1991: “special status student”, in parallel to high school)

### EMPLOYMENT HISTORY

2014–present    Full Professor, Head of the Department of Mathematics  
                  Weizmann Institute of Science, Israel  
                  From 2010: Theodore R. and Edlyn Racoosin Chair

2009–2014        Associate Professor  
                  Weizmann Institute of Science, Israel  
                  From 2010: Theodore R. and Edlyn Racoosin Chair

2006–2011        Associate Professor of Mathematics  
                  The Pennsylvania State University, Pennsylvania, USA

2003–2006        Assistant Professor of Mathematics  
                  The Pennsylvania State University, Pennsylvania, USA

2000–2003        Position: Warwick Zeeman Lecturer  
                  Mathematics Institute, Warwick University, England

## PROFESSIONAL ACTIVITIES AND RECOGNITION

### Honors

- 2013 Michael Brin Prize in Dynamical Systems  
Erdős Prize (Israel Mathematical Union)  
Levinson Prize in Mathematics (Weizmann Institute Scientific Council)
- 2010 Invited Speaker, International Congress of Mathematicians (International Mathematical Union)
- 2006 Sloan Research Fellowship (Alfred P. Sloan Foundation)
- 2002 Nessyaho Prize (best PhD in math in Israel for the year 2001) (Israel Mathematical Union)  
Award to Newly Appointed Lecturers (Nuffield Foundation)
- 2000 Gilboa Award for Research Students (Wolf Foundation)

### Research Grants

- 2014 ISF Grant 199/14, four years (principal investigator)
- 2009 ERC Starting Grant n° 239885, five years (principal investigator)
- 2007 NSF award DMS 0652966, three years (principal investigator)
- 2004 NSF award DMS 0400687, three years (principal investigator)
- 2002 EPSRC grant GR/R90406/01, for a year-long symposium (co-investigator)

### Participation in editorial boards

Member of the editorial board of *Journal of Modern Dynamics* (2013–present)

Co-editor of a special volume of *Stochastics & Dynamics* (March 2004 Issue)

Refereed papers for the following journals:

<i>American Journal of Mathematics</i>	<i>Advances in Mathematics</i>
<i>Annals of Mathematics</i>	<i>Annales de l'Institut Henri Poincaré</i>
<i>Bulletin de la Société Mathématique de France</i>	<i>Communications in Mathematical Physics</i>
<i>Discrete and Continuous Dynamical Systems</i>	<i>Duke Mathematical Journal</i>
<i>Ergodic Theory and Dynamical Systems</i>	<i>Fundamenta Mathematica</i>
<i>International Mathematics Research Notices</i>	<i>Inventiones Mathematicae</i>
<i>Israel Journal of Mathematics</i>	<i>Journal of Modern Dynamics</i>
<i>Journal of Statistical Physics</i>	<i>Letters in Mathematical Physics</i>
<i>Mathematical Research Letters</i>	<i>Nonlinearity</i>
<i>Pacific Journal of Mathematics</i>	<i>Probability Theory and Related Fields</i>
<i>Proceedings of the American Mathematical Society</i>	<i>Proceedings of the London Mathematical Society</i>
<i>Stochastics and Dynamics</i>	<i>Studia Mathematica</i>
<i>Transactions of the American Mathematical Society</i>	<i>Journal of the American Mathematical Society</i>

### Advisory boards of research agencies

Reviewed research proposals for the following organizations:

*The National Science Foundation* (US)

*Simons Foundation* (US)

*Fundação para a Ciência e a Tecnologia* (Portugal)

*The Chilean Research Fund Council*

*Natural Sciences and Engineering Research Council of Canada*

*Agence National de la Recherche* (France)

*The Engineering and Physical Sciences Research Council* (UK)

*European Research Council* (EU)

*Narodowe Centrum Nauki* (Poland)

### Invited mini-courses and lecture series

- 2014 *Symbolic dynamics for geodesic flows* (2 lectures)  
Working seminar on dynamical systems, Penn State, USA
- 2013 *Thermodynamic formalism for countable Markov shifts* (3 lectures)  
Large deviations and thermodynamical formalism, EPFL, Lausanne, Switzerland
- The transfer operator method* (2 two-hour lectures)  
Penn State working seminar on dynamical systems, Penn State, USA
- Markov partitions for diffeomorphisms* (3 two-hour lectures)  
Copernicus University in 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 in the Moduli Space, CIRM, Luminy, France
- Markov partitions for surface diffeomorphisms* (5 lectures)  
School and conference on dynamical systems, ICTP, Trieste, Italy
- Markov partitions for surface diffeomorphisms* (3 two-hour lectures)  
Poncelet Laboratory, Moscow, Russia
- 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)  
International Workshop on Global Dynamics Beyond Uniform Hyperbolicity, Northwestern, Illinois, USA
- 2003 *Thermodynamic formalism for countable Markov shifts* (3 lectures)  
Rennes seminar on dynamical systems, Rennes, France

- 2002 *Thermodynamic formalism for countable Markov shifts* (2 lectures)  
Workshop on countable Markov shifts, Luminy, France

#### Invited talks in conferences

- 2014 Ergodic Theory and Dynamical Systems, Toruń, Poland  
Progress in Dynamics (Katokfest), Banff, Canada
- 2013 Homogeneous Dynamics, Unipotent Flows and Applications (Ratnerfest), Hebrew University, Israel  
German–Polish Joint Conference on Probability and Mathematical Statistics, Toruń, Poland
- 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, College Park USA  
Dynamical systems II, University of North Texas, Denton, USA  
Special session on group actions on homogeneous spaces, AMS meeting, Washington DC, USA
- 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 and Smooth Ergodic Theory, Instituto Superior Técnico, Lisbon, Portugal  
Equadiff, Technical University of Vienna, Vienna, Austria
- 2006 Théorie ergodique en mesure infinie, Université Picardie Jules Verne, Amiens, France (2 lectures)  
Bristol Sessions in Advanced Mathematics: Effective equidistribution, Bristol, United Kingdom
- 2005 Dynamics and Related Fields, University of Maryland, MD  
Colloquium in Dynamical Systems and Smooth Ergodic Theory, Université Bordeaux 1, France  
Workshop on Probabilistic Limit Laws for Dynamical Systems, Edinburgh, United Kingdom  
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

### Seminar talks and colloquia

- 2014 Université 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
- 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

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- 2008 Tel Aviv University, Israel  
CUNY, New York, USA  
University of Surrey, Guildford, UK  
University of Bristol, UK  
Warwick University, Coventry, UK
- 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

**Visiting positions**

- 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)

**SERVICE**

Head, Department of Mathematics (2014–present)

Faculty hiring committee, member (2012–present)

Institute hiring committee (“V9”), stand-in member, (2013–present). From October 2013, member.

Feinberg Graduate School Thesis committee, member (2010–present)

**Conferences co-organized**

- 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)

**TEACHING EXPERIENCE****New lecture courses designed**

Graduate level	Advanced undergraduate level
<i>Ergodic theory*</i>	<i>Measure theory*</i>
<i>Thermodynamic formalism*</i>	<i>Probability theory from an analytic point of view</i>
<i>Dynamical systems</i> (year long)	<i>Linear analysis</i>

\* Lecture notes are available on my personal web page

**Other courses taught**

*Calculus, Calculus with Analytic Geometry, Classical Analysis, Complex Analysis*

**Other teaching activities**

Numerous lecture series and mini-courses, see page 3

Lectures to mathematically gifted high-school youths or advanced undergraduates in the following forums:

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

**GRADUATE STUDENTS AND RESEARCH PERSONNEL**

Post-docs	Dr. Yuri Lima, Weizmann Institute, 2011–2013 Dr. Younghwan Son, Weizmann Institute, 2013–2015 (expected)
Ph.D. students	Godofredo Iommi, Warwick University, graduated in 2004 Thesis title: <i>Multifractal analysis for countable Markov shifts</i>  Van T. Cyr, Penn State University, graduated in 2010 Thesis title: <i>Transient Markov shifts</i>  Yair Hartman, Weizmann Institute, 2011–present (ongoing) Thesis topic: Poisson boundaries of groups
M.Sc. student	Yair Daon, Weizmann Institute, graduated in 2012 Thesis title: <i>Bernoullicity of equilibrium measures on countable Markov shifts</i>
Summer student	Eduard Duriev, Weizmann Institute (Kupcinet-Getz program), Summer 2012 Project: <i>Random walks driven by irrational rotations</i>

(Last update: September 2014)