

THE HEBREW UNIVERSITY OF JERUSALEM
THE ISRAEL INSTITUTE FOR ADVANCED STUDIES

BANACH SPACES: GEOMETRY AND ANALYSIS

Memorial Conference for Joram Lindenstrauss

May 26-31, 2013

Feldman Building, Edmond J. Safra Campus at Givat Ram, Jerusalem

Organizing Committee:

Gideon Schechtman (Weizmann Institute of Science)
Tomek Szankowski (The Hebrew University of Jerusalem)
Benjamin Weiss (The Hebrew University of Jerusalem)

Sunday, May 26

08:30-09:30 Registration at IIAS Lobby

09:45-10:00 Welcome

PROGRAM

- 10:00-10:20 Bill Johnson (Texas A&M) Joram and Me and the Real Story behind the Johnson-Lindenstrauss Lemma
- 10:30-11:10 Vitali Milman (Tel Aviv) Asymptotic Theory of Convexity: From the Study of "Shapes" to the Study of Measure Distributions
- 11:10-11:40 Coffee break
- 11:40-12:30 Mark Rudelson (University of Michigan) Non-Asymptotic Approach in Random Matrix Theory
- 14:00-14:50 Stanislaw Szarek (Case Western University and Université Paris 6) Quantum Marginals, Majorization and Geometry of Banach

AFTERNOON SESSION Room 130 Room 128

- 15:00-15:30 Alexander Koldobsky (University of Missouri) Complex Intersection Bodies
Olga Maleva (University of Birmingham) Null Universal Differentiability Sets
- 15:40-16:10 Michal Wojciechowski (Polish Academy, Warsaw) On the Norm of Homomorphic Embeddings of Fourier Algebras
Beata Randrianantoanina (Miami) On Interval Based Generalizations of Absolute Continuity for Functions on \mathbb{R}^n

- 16:10-16:40 Coffee break
- 16:40-17:10 Alexander Litvak (University of Alberta) The Numerical Range of Random Matrices
- 17:20-17:50 Carsten Schutt (University of Kiel) Affine Invariant Points
- 18:00-18:30 Elisabeth Werner (Case Western) Divergence Inequalities for s -concave and Log concave Functions
 Wolfgang Lusky (University of Paderborn) On Weighted Banach of Analytic Functions
 Mikhail Ostrovskii (St. John's) On Metric Characterizations of the Radon-Nikodym and Related Properties of Banach
 Bentuo Zheng (University of Memphis) Banach with the Approximation Property which Fail the Strong Approximation Property
- 18:30 Reception at IIAS Lobby

Monday, May 27

- 09:10-10:00 Charles Fefferman (Princeton) Finding Outliers
- 10:30-11:20 Sergei Kisliakov (PDMI, St. Petersburg) Differential Expressions of Mixed Homogeneity and of Smooth Functions which They Generate
- 11:30-12:20 Rafal Latala (University of Warsaw) On the Boundedness of Bernoulli Processes
- 14:00-14:50 Boaz Klartag (Tel Aviv) Concentration of Measures Supported on the Cube and the Stability of the Brunn- Minkowski Inequality
- 15:00-15:30 Paul Muller (University of Linz) Davis-Garsia Inequalities for Hardy Martingales and Dyadic Perturbations

AFTERNOON SESSION Room 130

- 15:40-16:10 Przemyslaw Wojtaszczyk (University of Warsaw) Conditional Quasi-Greedy Bases in Hilbert Space Eilat Hall
 Eva Kopecka (University of Innsbruck) A Product of Three Projections
- 16:10-16:40 Coffee break
- 16:40-17:10 Emanuel Milman (Technion) Towards Generalizations of Sudakov's Inequality and the Johnson-Lindenstrauss Lemma
- 17:20-17:50 Niels Joergen Nielsen (Odense) On GL which have the Grothendieck Property GT
 Ludek Zajicek (Charles University, Prague) New Applications of Gamma - Null Sets
 Sean Li (New York) Coarse Differentiation of Lipschitz Maps

Tuesday, May 28

- 09:10-10:00 Hillel Furstenberg (The Hebrew University of Jerusalem) Amenability, the Fixed Point Property, and Harmonic Functions
- 10:30-11:20 David Preiss (University of Warwick) Differentiability of Lipschitz Functions
- 11:30-12:20 Assaf Naor (New York) Vertical Perimeter versus Horizontal Perimeter
- 14:00-19:00 Excursion to the Old City of Jerusalem
- 19:00 Dinner at the Terasa Restaurant

Wednesday, May 29

- 09:10-10:00 Elon Lindenstrauss (The Hebrew University of Jerusalem) Spectral gap and self-similar measures
- 10:30-11:20 Spiros Argyros (NTU of Athens) A Reflexive Space with the Hereditary Invariant Subspace Property
- 11:30-12:20 Thomas Schlumprecht (Texas A&M) Bases Formed by Translates of One Element in $L_p(\mathbb{R})$
- 14:00-14:30 Hermann König (University of Kiel) Best Constants in the Khintchine-Steinhaus Inequality
- 14:40-15:10 Haskell Rosenthal (University of Texas, Austin) A possible counter example to the Hyperinvariant Subspace Problem

AFTERNOON SESSION Room 130 Room 128

- 15:20-15:50 Jelani Nelson (Harvard) Random matrices, dimensionality reduction, and faster numerical linear algebra algorithms
- 16:00-16:20 Nikhil Srivastava (Princeton) TBA
Konstantin Tikhomirov (University of Alberta) Almost Euclidean Sections in Symmetric
Eugeniu Spinu (Lakehead) Subprojective Banach
- 16:20-16:50 Coffee break
- 17:00-17:30 Radoslaw Adamczak (University of Warsaw) Concentration Inequalities for Non-Lipschitz Functions with Bounded Derivatives of Higher Order
Florent Baudier (Texas A&M) On the Utilization of Symmetric Difference Metrics in Nonlinear Geometry of Banach
- 17:40-18:00 Daniel Reem (IMPA, Brazil) Order Preserving and Order Reversing Operators on the Class of Convex Functions in Banach
Bunyamin Sari (University of North Texas) On Conditional Spreading Sequences and Banach with \mathcal{C}_0 Spreading (and Asymptotic) Models

- 18:10-18:30 Dan Freeman (Saint Louis) Equilateral Sets in Uniformly Smooth Banach
Alejandro Chavez (University of Texas, Austin) Tensor Products of Operator
and Completely \mathcal{S}_p - Summing Maps
- 19:00 Visit to Herod the Great exhibit, and dinner at the Israel Museum (for
participants who confirmed in advance)
- 19:00-19:15 Meeting at Museum entrance
- 19:15-20:30 Herod exhibit, Shrine of the Book, Second Temple Model
- 20:30 Dinner at the Museum's Modern Restaurant (These two events are
sponsored by the Lindenstrauss family)

Thursday, May 30

- 09:00-09:40 Nicole Tomczak-Jaegerman (University of Alberta) Geometry of Log-Concave
Ensembles and Applications
- 09:50-10:20 Semyon Alesker (Tel Aviv) On Extendability by Continuity of Valuations on
Convex Polytopes
- 10:20-10:50 Coffee break
- 10:50-11:40 Vladimir Fonf (Ben-Gurion) TBA
- 11:50-12:20 Gilles Godefroy (Université Paris 6) Smoothness of Banach and Joram
Lindenstrauss' Pioneering Works
- 12:30-13:00 Apostolos Giannopoulos (University of Athens) Geometry of Isotropic Log-
Concave Measures
- 13:00-14:30 Lunch

The following lectures will take place in the Mathematics (Einstein) Bldg., Hall 2

- 14:30-15:30 Bela Bollobas (University of Cambridge) Bootstrap Percolation in all
Dimensions
- 15:30-16:00 Coffee break
- 16:00-16:40 Rolf Schneider (University of Freiburg) Convex Bodies from the Generic
Viewpoint
- 16:50-17:20 Krzysztof Oleszkiewicz (University of Warsaw) On Mimicking a Rademacher
Sequence
- 17:30 Farewell party at the IAS Lobby