

ERC Workshop: Adventures in Combinatorial Geometry
-- Geometric Transversals, Epsilon-Nets, and Ramsey
Ein-Gedi, January 27—31, 2019

DAY 1 27.1.19

9:00 Bus from Tel-Aviv, Orchid Hotel Tel Aviv

11:00 Arrival at Ein Gedi Hotel, Reception – Registration & Light refreshments

13:00-14:00 Lunch

14:30-15:15 **Andrey Kupavskii: "Crossing Tverberg theorem"**

15:30 Rooms Check in

16:00-16:30 Coffee Break and Open Session

16:30-17:10 **Florian Frick: "New Applications of Tverberg's Theorem: Fair Splittings by Independent Sets"**

19:00-20:00 Dinner

DAY 2 28.1.19

7:00-9:00 Breakfast

Session 1

9:00 - 9:45 **Shakhar Smorodinsky: "on χ -bounded graphs and hypergraphs arising in geometry"**

9:50 - 10:35 **Janos Pach: "Disjointness graphs of strings"**

10:35-10:45 Coffee break

Session 2

10:45 - 11:35 **Wojcieh Samotij: "Lower bounds for ϵ -nets for lines in the plane"**

11:40 - 12:20 **Chaya Keller: "Improved lower bounds on the Hadwiger-Debrunner numbers"**

13:00-14:00 Lunch

Session 3

14:30-15:20 **Nati Linial: "On the geometry of graphs"**

15:25-16:10 **Imre Barany: "An Application of the Universality Theorem for Tverberg Partitions"**

16:15-16:30 Coffee break

Session 4

16:30-17:10 **Csaba Toth: "Convex Polygons in Cartesian Products"**

19:00-20:00 **Dinner**

20:00 **Cocktail Reception at the Hotel**

DAY 3 29.1.19

7:00-9:00 Breakfast

9:00-10:30 Work in groups

10:30-11:00 Coffee Break

Session 1

11:00-11:45 **Luis Montejano: "On the real geometric hypothesis of Banach"**

11:50-12:30 **Alan Lew: "Collapsibility of Simplicial Complexes of Hypergraphs"**

13:00-14:00 Lunch

Session 2

14:30 - 15:20 **Roy Meshulam: "Topology and combinatorics of the complex of flags"**

15:25 - 16:05 **Natan Rubin: "Planar point sets determine many pairwise crossing segments"**

16:05-16:30 Coffee break

Session 3

16:30 - 17:15 **Micha Sharir: "Radial isotropic position: Theory, algorithms, and applications"**

17:20 - 18:00 **Boris Aronov: "Constructive Polynomial Partitioning for Algebraic Curves in R^3 with Applications"**

19:00-20:00 **Dinner**

DAY 4 30.1.19

7:00-8:45 **Breakfast**

8:45-12:00 Excursion to Arugot Stream

13:00-14:00 **Lunch**

Session 1

14:30-15:15 **Sergey Avvakumov: "Fair partition of a convex planar pie"**

15:20-16:00 **Arseniy Akopyan: "Any cyclic quadrilateral can be inscribed in any closed convex smooth curve"**

16:00-16:30 **Lunch**

Session 2

16:30 -17:10 **Gabriel Nivasch: "Grid peeling and the affine curve-shortening flow"**

17:10-18:00 **Open Problems**

19:00-20:00 **Dinner**

DAY 5 31.1.19

7:00-9:00 *Breakfast*

9:00-9:30 *Rooms Check out*

Session 1

9:30-10:15 **Gabor Tardos: "On a graph coloring conjecture of Erdos and Hajnal"**

10:20-11:00 **Roman Glebov: "Perfect Matchings in Random Subgraphs of Regular Bipartite Graphs"**

11:00-11:30 *Coffee break*

Session 2

11:30-13:00 *Work in groups*

13:00-14:00 *Lunch*

14:30 *Departure to Tel Aviv and Ben-Gurion Airport*