

## Significant Papers of Shmuel Friedland

Lower bounds for partial matchings in regular bipartite graphs and applications to the monomer-dimer entropy, (with L. Gurvits), *Combinatorics, Probability and Computing*, 15 pp., 2007, to appear. (See §6 of the overview of my papers.)

Theory of computation of multidimensional entropy with an application to the monomer-dimer problem, (with U. Peled), *Advances of Applied Math.* 34(2005), 486-522. (See §13 of the overview of my papers.)

On spaces of matrices containing a nonzero matrix of bounded rank, (with D. Falikman and R. Loewy), *Pacific J. Math.* 207 (2002), 157-176. (See §10 of the overview of my papers.)

Entropy of algebraic maps, *J. Fourier Anal. Appl.*, Kahane's issue, 1995, 215-228. (See §13 of the overview of my papers.)

Entropy of polynomial and rational maps, *Ann. of Math.* 133 (1991), 359-368. (See §13 of the overview of my papers.)

Dynamical properties of plane polynomial automorphisms, (with J. Milnor), *J. Ergod. Th. & Dynam. Sys.* 9 (1989), 67-99. (See §13 of the overview of my papers.)

The formulation and analysis of numerical methods for inverse eigenvalue problems, (with J. Nocedal and M.L. Overton), *SIAM J. Numerical Anal.* 24 (1987), 634-667. (See §5 of the overview of my papers.)

Regular subgraphs of almost regular graphs, (with N. Alon and G. Kalai), *J. Graph Theory* 37 (1984), 79-91. (See §11 of the overview of my papers.)

On the crossing rule, (with J. Robbin and J. Sylvester), *Comm. Pure Appl. Math.* 37 (1984), 19-37. (See §10 of the overview of my papers.)

Simultaneous similarity of matrices, *Adv. in Math.* 50 (1983), 189-265. (See §7 of the overview of my papers.)

Eigenvalues inequalities for the products of matrix exponentials, (with J. Cohen, T. Kato and F. Kelly), *Linear Algebra Appl.* 45 (1982), 55-95. (See §4 of the overview of my papers.)

A proof of a generalized van der Waerden conjecture on permanents, *Linear Multilin. Algebra* 11 (1982), 107-120. (See §6 of the overview of my papers.)

The association of resonance states with incomplete spectrum of finite complex scaled Hamiltonian matrices, (with N. Moiseyev), *Phys. Rev. A* 22 (1980), 619-624. (See §7 of the overview of my papers.)

A lower bound for the permanent of doubly stochastic matrices, *Ann. of Math.* 110 (1979), 167-176. (See §6 of the overview of my papers.)

Inverse eigenvalue problems, *Linear Algebra Appl.* 17 (1977), 15-51. (See §5 of the overview of my papers.)

Eigenvalue inequalities for Dirichlet problem on spheres and the growth of subharmonic functions, (with W.K. Hayman), *Comment. Math. Helvetici* 51 (1976), 133-161. (See §4 of the overview of my papers.)

Nonoscillation, disconjugacy and integral inequalities, *Memoirs Amer. Math. Soc.* 176 (1976), 78 pp. (See §3 of the overview of my papers.)

Some inequalities for the spectral radius of nonnegative matrices and applications, (with S. Karlin), *Duke Math. J.* 42 (1975), 459-490. (See §4 of the overview of my papers.)

Extremal eigenvalue problems for convex sets of symmetric matrices and operators, *Israel J. Math.* 15 (1973), 311-331. (See §4 of the overview of my papers.)

On an inequality connected with the coefficient conjecture for functions of bounded boundary rotations, (with Aharonov), *Ann. Acad. Sci. Fenn.* AI 524 (1972), 14 pp. (See §2 of the overview of my papers.)

Univalence conditions and Sturm–Liouville eigenvalues, (with Z. Nehari), *Proc. Amer. Math. Soc.* 24 (1970), 595-603. (See §2 of the overview of my papers.)